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LECTURES ON SURGERY, MEDICAL AND OPERATIVE,

DELIVERED AT

St. Bartholomew's Hospital;

BY MR. LAWRENCE.

LECTURE V.

Inflammation.

In the last lecture, gentlemen, I alluded to the circumstance, that in an inflamed part, when examined after death, the vessels appeared to be more numerous, and filled with blood. When a part that has been inflamed is thus examined, we find all the textures preternaturally red. The number of vessels seem to us increased, and they are all turgid with blood; deposition is found to have taken place into the textures of the inflamed organ generally. When we come to feel those textures, they are firmer than natural, but yet they are more easily lacerated; so that the effect of the inflammatory process is to alter their natural cohesion; and this is a general result of inflammation, taken in its active state. This is particularly seen in the *brain*, where a peculiar softening of the structure takes place, which was first observed without reference to inflammation, and described by the French under the name of *ramollissement*, but which has since been found to depend on inflammation of the cerebral texture.

You will probably inquire, what is the deposition which takes place into the textures of the inflamed part, and produces this firmness to the touch after death? In answer to that inquiry, it is generally stated, that the new substance thus deposited is *lymph—coagulating lymph*, or, as it is sometimes called, *coagulable lymph*. It is said to be nearly the same substance as the fibrin of the blood, viz., that whitish and tough part which is seen after washing away the red particles from the *crassamentum*. It is said to be closely analogous to the buffy coat of inflammatory blood. The increased deposition, then, is ordinarily stated to be lymph, or coagulating lymph. This observation, however, does not extend to the swelling in the neighbourhood of the inflamed part; the circumference presents a soft, or œdematous condition; in fact, inflammation is not so violent in the circumference as in the centre of disease, and there it produces an effusion of *serous* fluid, similar to what takes place in anasarca. We have a good opportunity of seeing the nature of what is effused under inflammation, by observing what happens when the serous membranes are inflamed, because there, the substance which, in other parts, is deposited internally, is effused on a surface, and thus rendered obvious to the senses. When the peritoneum, or pleura, is inflamed, we find there is a kind of thin *glue*, that is, a soft and semi-transparent substance, deposited on the inflamed membrane, by which the opposite surfaces, that are naturally free and unconnected, become agglutinated. This is the state which is exhibited under *slight* degrees of inflammation; but when it is more violent you have an opaque yellowish substance, of a somewhat fibrous appearance, deposited on the surfaces of those membranes. This, in its chemical properties, corresponds very closely to the fibrin of the blood, and is the substance to which, more particularly, the name of lymph is given. On the surfaces of the serous membranes you see large portions of this lymph, in consequence of inflammatory disturbance. At first it lies loosely connected to the surfaces, so that you can easily scrape it off with the finger, or handle of a knife; but within a short period blood-vessels are found in that substance. There seems to be an extension of the blood-vessels from the surfaces in which the lymph is effused; at all events, the substance which is at first inorganic soon becomes organised, and this takes place more rapidly than you would at first imagine; for instance, in an inflamed intestine, blood-vessels have been injected in the newly-deposited lymph in twenty-four hours from the commencement of the inflammation.

When the lymph thus becomes organised, it assumes, more or less, the nature of the part in which it is deposited; thus, when adhesions form between the various parts contained in the cavity of the abdomen, they are assimilated in nature to the surface of the peritoneum; they constitute smooth and polished bands, or plates, preternaturally connecting the parts together, and presenting a surface which you could not, anatomically, distinguish from the natural and healthy structure of the peritoneum. Here is an example of such deposition taking place between the peritoneum and liver. [The learned lecturer exhibited the specimen.]

In that case we have the opportunity of clearly seeing the nature of the material thrown out by the vessels in the first instance, and the successive changes it undergoes from its inorganic state, until it becomes organised, and forms a new structure in the body. We can see the same phenomena in inflammation of the iris. Lymph is deposited in the texture of the iris, altering its colour and changing the natural appearance of its structure; or it is thrown out in distinct masses on its surface; or it constitutes the medium of adhesions between the margin of the pupil and capsule of the lens. Thus the same changes take place in this texture of the eye that are seen in the serous membrane of the abdomen.

In inflammation of a part like the hand, when lymph is deposited in the interior of the various textures, the phenomena are rather more obscure. We do not so clearly see what happens, but yet, from what we do see, there can be no doubt that it is the same process as that which I have detailed, namely, that, first, lymph is effused into the parts; secondly, that it becomes organised. Hence, when we examine the part at a more remote period, there is preternatural thickening and condensation of the structures; and the parts, which should be loose, are adherent. Thus we can explain how, in a case of violent inflammation, as of the hand, for instance, the motions of the fingers become materially limited.

Sometimes so much hardness is produced by this interstitial deposition in the inflamed part, and by subsequent organisation, that the part is said to take on the condition of *scirrhus*. You may even find the production of scirrhus mentioned as a consequence of inflammation in modern surgical works. This is quite an erroneous view of the subject. The consequence of ordinary inflammation is simply induration; you can always discern the characters of the natural structures. In scirrhus, the natural structure is quite lost, and a new organisation substituted.

I enumerated to you, in the last lecture, the different effects of the inflammatory process, which are commonly called *terminations* of inflammation. I mentioned the objection to that phrase, namely, that the inflammation does not terminate with the production of these effects, except in the cases of delitescence and resolution, but that it goes on, and is often only a little diminished in violence, after these effects have taken place.

You are not to understand that each inflammation produces one only of these effects; on the contrary, you have often two or more of them combined together. When suppuration occurs from inflammation of the hand, a portion of the integuments, covering the matter, may mortify; and there you have both suppuration and mortification. You will have suppuration and mortification in one part, while the rest of the inflammation slowly subsides; that is, terminates by resolution. With the termination of inflammation in resolution, you may have considerable swelling from deposition of lymph in the inflamed textures. You are further to understand, that inflammation does not *necessarily* come to an end, after producing one of these effects. The progress of inflammation, and its effects, would be much more simple, and less injurious, if that were so. But after suppuration has taken place in one part of the hand—for instance, unless the case be judiciously treated, and the patient take care of himself—fresh inflammation and suppuration will occur in the neighbouring parts. Thus you will find that inflammation originating in the finger gradually extends into the palm of the hand, and from thence up the fore-arm, producing, in these various parts, changes of structure, by which the motions of the limb are rendered very imperfect, or entirely lost.

The notion of inflammation, which I have exhibited to you from the appearance it assumes in an external part like the hand, has been generalised, so as to be made a kind of representation of what occurs in inflammation wherever it may be seated. The nature and effects of the diseased action may be the same, as far as we know, in the internal parts of the body; but our notions can only be formed with any degree of accuracy, when the disease is seated on the exterior. The idea of inflammation, drawn from this source, has been generalised; and hence inflammation, considered abstractly, has been said to consist in the four circumstances I have detailed; viz. redness, swelling, heat, and pain. I think, however, that in order to make the enumeration complete, two other circumstances should be added. We should take into our view that very important circumstance, *interstitial deposition*; and we should also include the impaired or suspended function of the affected organ.

We should not include, in our general notion of inflammation, the occurrence of those *sympathetic* effects which I mentioned in my last lecture, because they do not invariably attend it. The sympathetic disturbance of the sanguiferous, nervous, digestive, secreting, and excreting systems, are only observed when the inflammation is violent, or when it attacks any important organ. You may, therefore, have inflammation of an organ of little consequence, producing hardly any effect beyond the disturbance of that organ itself. This sympathetic or constitutional disturbance, however, is very important in a practical point of view, because it denotes either a serious degree of inflammation, or the existence of that disease in a part of consequence. It is important, as often leading you to the selection of means by which the disease is to be treated. For example, general disturbance would lead you probably to general, instead of local bleeding.

The question, however—what is inflammation? is not satisfactorily answered by enumerating these circumstances. The redness, swelling, heat, and pain, are the external signs or symptoms of inflammation; they are the characters which denote its existence; but the question still recurs, what is the change in the state of the vessels, that produce these four signs or symptoms? What is the alteration in the action of the capillary system that gives rise to such symptoms, because it is that which properly constitutes inflammation? I have already had occasion to mention, in considering what is called the *theory* of inflammation, that this is a point not clearly made out. We really cannot say, precisely, in what that disturbance, which constitutes inflammation, consists. We know not what is the precise way in which the capillary system of the part is deranged, so as to produce the alteration. Indeed, we are not surprised to find that this is not well understood, when almost directly opposite opinions are entertained, even at this moment, respecting the state of the circulation and condition of the vessels in the inflamed spot. Some persons suppose there is an obstruction to the circulation of the blood; and others, with much greater reason, I think, that the blood passes more quickly through the part. If you open a vein between the seat of disease and the heart, you will get a much greater quantity of blood in the same time, than you would if no inflammation existed. Some have believed that the minute vessels in inflammation are in a state of atony or weakness, while others have supposed them to be in a high condition of excitement. I have alluded to the idea of some, that there is spasm of the vessels; and one circumstance that has been adduced in defence of that is, the suspension of secretion when inflammation is seated in a glandular organ. It has been said, that that arises from spasm in the minute vessels of the part. The ordinary office of the capillary vessels of a gland is to secrete, but, in a state of inflammation, they are unnaturally disturbed; they are too active and busy in their new occupation, to carry on the old one. That there can be no spasm is pretty clear, from the effusion of lymph into the interstices of the part. Unless the vessels were open, this effusion could not take place. Being unable to determine the precise nature of inflammation from the changes that take place, or to assign to it a term founded on the state of the vessels which produce these phenomena, we have been obliged here, as in other cases, to denominate inflammation symptomatically. Inflammation, from the term *flamma*—a flame, denotes the heat which usually accompanies it in external parts. Then, if we have been unable to discover the precise nature of inflammation, which is of so common occurrence, and which constitutes so large a portion of all the diseases we treat, you will not be astonished that the attempts to construct nosologies, grounded on the nature of diseases, should have altogether failed.

The former circumstances I have enumerated must be combined together, in order to characterise inflammation; taken separately, they afford no proof of its existence. Redness occurs in blushing. It may be produced by mechanical friction, and yet there is no inflammation. You may make a part of the body hotter than natural, by rubbing it or exposing it to fire, without causing inflammation. Again, you may have great swelling, as in anasarca, without inflammation. You may likewise have great pain in a variety of complaints, where there is nothing like inflammation present. In order, therefore, to characterise inflammation, we must have these four circumstances all combined, and existing at the same time. When they are seen together, they certainly prove that inflammation is present, but they are not essential to proving its existence; that is, we recognise the existence of inflammation where we cannot see these four circumstances. The existence of these circumstances proves inflammation to have reached a certain height, but slighter degrees of the same disturbance may exist without them. If you have a very violent degree of disturbance in the capillary vessels, you will have that part swelled, red, hot, and painful; but under many circumstances, interstitial depositions, and the consequent changes which it produces, namely, thickening, induration, consolidation, and opacity, afford the only criterion, and we find them a satisfactory criterion of

the state of inflammation. In the case of serous membrane, we do not find the texture of the membrane swelled under inflammation; and, I believe, in many instances, we are hardly able to say it is redder than natural. The arachnoid coat of the brain is frequently the seat of inflammation, but it exhibits no redness; the texture is swelled and rendered opaque, but it is by no means red. We see the iris inflamed, and have no doubt of the existence of inflammation, though we cannot discern it to be swelled, red, hot, or painful. In inflammation of the cornea, we see merely that there is interstitial deposition. Even considering these characters as the criterion of inflammation, they are only of importance in *external* organs; for when we come to *internal* parts, we cannot apply this criterion. We cannot tell whether the liver is swelled, red, hot, and painful. How can we say whether or not the retina is in that condition?

Inflammation, gentlemen, is by no means one and the same process under all circumstances; on the contrary, it varies very much. If you cut or scratch the finger, inflammation will be produced. Sometimes without any injury, an inflammation takes place near to the nail, constituting what we call whitlow: the finger may be inflamed with the rest of the limb in erysipelas; it may be the seat of chilblain, gout, or rheumatism. Here, then, are six different states of the same part, all called inflammation.

Inflammations, in the first place, differ in degree, that is, there may be *more* or *less* of the disturbance. When there is more, the progress of the case is rapid; when there is less, it proceeds more slowly. This distinction is marked, generally, by the terms *acute* and *chronic*. Violence of symptoms, and rapidity of progress, denote acute inflammation; mildness of symptoms and slowness of progress, chronic inflammation. Now you will not understand from this, that there are exactly two differences of degree, and that all inflammations must either be rapid or slow, so as to come under the one or other head. These words only denote in a general way the difference, but, in point of fact, there is an infinite number of different degrees. You are often at a loss to determine whether you should assign a particular inflammation to the head of the acute, or to that of the chronic state. Acute and chronic are not, in point of sense, exactly opposed to each other. The epithet acute denotes the violent state of symptoms, while the term chronic points out the duration of the complaint, so that the terms are not precisely contrary to each other. Acute is called also *active*, *violent*, or *phlegmonous* inflammation. The term phlegmonous is frequently employed; it is derived from the Greek word *phlegmon*, and was the term applied by the Greeks to the active form of inflammation seated in the cellular membrane and skin, which terminates in abscess. In this, the characters I have described are particularly well marked. The description that has been given of inflammation of the hand, will sufficiently show what is acute, active, or phlegmonous inflammation: it is a violent disturbance which cannot last very long. Unless it is cut short by proper treatment, it will soon produce either mortification or suppuration. It is too violent a disturbance to last for any length of time: like a very violent fire, it will soon burn itself out. Chronic is also called *languid*, *slow*, or *indolent*, and its characters vary much from those of the acute. The vascular disturbance and redness are much less; often there are hardly any: the pain is slight. Frequently chronic inflammation will take place, proceed to a considerable extent, and last for some time, before the patient is aware of its existence. But though the chronic may appear to be of much less consequence than the acute; in this view, considering it in another way, it is of much more importance. The swelling of the parts from interstitial deposition is much more, and consequently, there is a much more serious change in the structure of the affected organs.

With respect to the deposition which takes place in chronic inflammation, we are hardly able to speak very clearly. It is difficult to know the precise nature of the new matter deposited, and animal chemistry has not yet afforded us any very clear information upon it. If we take the example of the testicles, which are often the seat of this disease; on cutting into them, we shall find a considerable quantity of new matter, quite different from the natural structure of the parts disseminated through them. If a testicle thus diseased be injected, the new matter is found to admit only partially the substance of the injection into it. Examples of this I now exhibit to you. [The preparations were shown on the table.] In the case of the serous membranes, we frequently see a new production formed, under chronic inflammation, of a very marked kind; and I now show you the specimen of a complete adventitious membrane, formed on the inner surface of the dura mater, in consequence of chronic inflammation in the head.

Thus you see, that in acute inflammation there is very violent disturbance, which is of a temporary kind; it quickly passes by, and the part recovers its natural condition. In chronic inflammation, the appearances are less alarming, and the disturbance seems to be at the moment less serious, but the change of structure is much more, and considerable and often serious disorganisation results from it, which importantly impairs, or quite destroys, the function of the part.

The degree of danger, then, in the two processes, is nearly in an inverse ratio to their apparent violence.

We frequently hear and read of the expressions acute and chronic stages of inflammation. If we survey any particular case, we do not find that the inflammation is one and the same process throughout; we find that there is a succession of phenomena. Inflammation commencing insensibly, gradually increasing, acquiring a certain development, and remaining for a given period in that state, then gradually declines, until the part recovers its healthy condition. The whole of the circumstances embraced in this course, pass under the name of inflammation, and yet the various portions of the progress differ considerably from each other. If we were to divide each inflammation into three periods—a period of formation, in which the disease arises and proceeds to a certain extent, a period of full development, and another of decline, we should find the two first of these are nearly alike in active process, that is, they occupy nearly the same length of time; but the third period, that which intervenes from the symptoms beginning to lessen, until the part recovers its natural state, differs very much in different instances. When the disease is very violent, when it is allowed to pursue its progress uncontrolled—when the patient neglects himself—when little or no treatment is employed, and more particularly when the circumstances that have excited inflammation still continue to act, although the more violent symptoms may be lessened, yet the state of inflammation continues for a long period before the natural condition is recovered. The part is still inflamed, the pain is less, however, and the interruption of the functions is diminished. This minor degree of inflammation is frequently called the chronic stage; and the former period in which the symptoms have been more violent, is called the acute. Thus the words acute and chronic are employed to designate the different periods of one and the same inflammation. If inflammation has been very actively treated, and judicious means employed to arrest its progress, the part recovers its natural state very quickly, and you can hardly say that any chronic stage occurs.

Persons have not only employed these terms to designate one and the same inflammation, but they have contended, that these two periods are totally different kinds of disturbance; that the acute is the result of increased action, and that the chronic is the result of debility, or weakness in the part; and they have founded on this alleged difference a corresponding diversity of treatment, asserting that the chronic requires tonics and stimulating treatment, and that the acute calls for the contrary: I consider that this view is altogether erroneous. Without undertaking to say there is no difference between the acute and chronic generally, I have no hesitation in stating, that there is no essential difference between the acute and chronic stages of *one and the same* inflammation. The chronic period is one of less violent disturbance, but still it is the same kind of disorder, only differing somewhat in degree. In proof of this, we find the acute passing into the chronic, and the chronic may relapse into the acute. When inflammation in the eye has gone into its chronic stage, if the person uses the organ, and has other causes of excitement applied to it, he may have, all on a sudden, the phenomena of the acute reproduced; and when you find in those states that the one condition can pass into the other, and *vice versa*, I think you cannot admit, for a moment, the notion that they are opposite in their nature and require opposite treatment.

Again; we sometimes hear of *active* and *passive* inflammation, which convey to my mind either no notion at all, or an erroneous one. I have mentioned to you generally, that inflammation consists in increased action, and consequently passive inflammation implies a contradiction in terms. The notion of passive inflammation is founded on the same erroneous view which I have mentioned respecting the chronic, that there is a condition of inflammation dependent on debility, admitting the acute to depend on augmented action. It is true, inflammations will differ according to the strength or weakness of patients; but what I mean to contend for is, that there is no inflammation taking its origin from a state of weakness of the parts themselves. A state of weakness, in some cases, may be the *remote* cause, but when inflammation occurs, that inflammation is owing to a state of increased action in the vessels of the part.

We also hear of the terms *arterial* and *venous congestion*. I acknowledge that these convey no kind of clear idea to my mind. The minute vessels, the capillary system, in which inflammation seems incontestably to rest, is an inextricable net-work, in which we cannot distinguish arteries from veins. After we have reached a certain point, we cannot make a difference between them; therefore we are quite unable to say that one state of inflammation is owing to the congestion of arteries, and another to that of the veins.

Inflammation differs essentially in the effect it is capable of producing. When causes of disease are applied to internal parts, we sometimes observe derangement in their functions without our knowing exactly whether there is a change in the condition of the parts, and we call that derangement a state of *disorder*, or *irritation*. This, pro-

bably, is the commencement of the disturbance, which, in a more advanced condition, would be considered inflammation. We sometimes see a simple state of distention in the vessels; this is called *congestion*. Sometimes that state of fulness is evinced by *hæmorrhage*, by the discharge of blood from the affected part. This may take place from the surface, as in mucous membranes, or into the texture of a part, as in the brain, causing apoplexy.

Again; we have effusion of serum, lymph, or pus, or mortification. We have not, perhaps, any direct evidence for saying that the disturbance in a part, which we call irritation, or disorder, is actually the commencement of inflammation; we only assume it as probable. In fact, irritation, if employed as contra-distinguished from inflammation, does not denote any definite state that I am acquainted with. Generally speaking, irritation is used to denote disturbance in the nervous system; but if we adopt it in reference to the body generally, I think we shall be able, in most instances, to analyse it into something like inflammation.

Now, the various effects I have mentioned, are generally ascribed to difference in the degrees of inflammation, but not entirely so. Hæmorrhage is the result of inflammation; hæmorrhage into the substance of organs is rather uncommon; it takes place into the substance of the *brain* and *lungs*, but seldom into any other part. Suppuration seldom takes place in internal *glandular* parts. If we admit the *spleen* to be of that character, I fancy an instance has hardly been known of abscess forming there; it is very rarely that abscess forms in the *kidney*; abscess in the *liver* is not common in these climates; so that there are peculiarities in the effect of inflammation which are not altogether referrible to difference in degree.

Inflammation differs very much in its kind and character, that difference being, in great measure, dependent on the cause that produces it. I have already mentioned the differences between common and specific inflammation, and I need not advert to this again. I would only say that, in specific diseases, we generally find a disposition to certain changes in each case. Syphilis affects various parts; it generally goes into ulceration. In scrofula, ulceration and tubercular deposition are the most common termination.

In common inflammation, there is generally an uniform progress of the affection from its first commencement to its termination. In specific, there are frequent irregularities. The particular sudden disappearance of the inflammation, or *delitescence*, is frequently observed. This is the case in gouty and rheumatic inflammations. It is by no means uncommon in them, to have the inflammation suddenly stopped in one part, and as suddenly appear in another; and this has been called *metastasis*, which has been considered to denote a translation of the disease. The idea which has been entertained of metastasis is, that the diseased matter which was seated in one organ, has been conveyed to another part of the body. It is a notion founded on the old ideas of humoral pathology. Now, without entertaining any such mechanical idea of it, I may mention to you that it frequently happens in gouty inflammation, that the inflammation quickly disappears from one part, and another becomes as quickly affected. Indeed, that is all we can say about it; for how it happens, we are totally unable to explain. A person who has swelling of various joints, will have those swellings suddenly removed, and perhaps immediately afterwards inflammation came on in the lungs or heart; and it is this liability to metastasis, that constitutes a particular danger in such cases.

These then are the particular points in which inflammations differ from each other. There are some few others which it is only necessary for me to advert to generally. There are diversities according to temperament, age, sex, mode of life, and diet. Inflammations are also modified by the state of the climate, and condition of the atmosphere. Certain peculiarities in the atmosphere are capable of exercising a marked influence over inflammatory diseases; hence we find, that under certain circumstances, particular kinds of inflammation will take place in large numbers; as in hospitals, you will find at times a great number of cases of erysipelas.

PUERPERAL FEVER.

To the Editor of THE LANCET.

SIR,—As puerperal fever has, of late, been a subject of frequent discussion, the following cases, I hope, will not be uninteresting.

A. W. was delivered on Saturday at half past one P.M.; the fœtus and placenta were both expelled before I arrived; had considerable flooding, which was stopped by the application of cold cloth above the pubis, and stimulating the uterus externally by friction, though not before she had lost a considerable quantity of blood, which produced syncope. I left her about four o'clock, and ordered her twenty-five drops of tincture of opium in an ounce and a half of water, to be taken immediately; to be kept perfectly quiet, and to take nothing, except a cup of cool tea or gruel.

Sunday morning. Felt comfortable; slept well during the night; pulse 90, but soft; the lochia continuing; if her bowels should not be moved, to take half an ounce of castor oil in the morning.

Monday, eight o'clock P.M. Pulse 120 in a minute, and jerking; abdomen tumid and tense, the slightest pressure producing the most violent pain, particularly in the region of the uterus; headach; tongue clean and moist; does not think it was ushered in by a shivering, if so, it must have been extremely slight; lochia nearly ceased; milk suppressed. Bled her from the arm to the amount of twenty-five ounces in the recumbent posture, which produced syncope; after which she expressed herself much relieved. Ordered her abdomen to be fomented with hot water for half an hour, and to take immediately three drachms of castor oil, and five drachms of oil of turpentine, in a little mint-water. Saw her again at midnight; pain in the abdomen entirely removed; had taken about two-thirds of the turpentine oil, which produced one copious watery evacuation; her abdomen to be again fomented, and to take the remainder of the turpentine, &c.

Tuesday morning, half past seven. Had slept comfortably during the night; had another copious watery evacuation; no pain upon pressing the abdomen; tongue moist; pulse 112. Calomel, six grains; opium, one grain; divide into two pills, one to be taken immediately, and the other four hours after.

One P.M. Bowels moved twice since morning; no pain upon pressing any part of the abdomen; tongue moist; pulse 112. Calomel, twenty-four grains; opium, four grains; divide into five pills, one to be taken every five hours; three drachms of oil of turpentine every six hours.

Wednesday morning. Had six motions during the night; her head was affected by the turpentine, and the nurse omitted both it and the pills during the night, but resumed both this morning; pulse 102; no pain in the evening; the mouth was slightly affected. The pills and turpentine to be discontinued. She had now taken twenty-six grains of calomel, and two drachms of turpentine, with a slop diet.

Thursday. Pulse 100, small, and soft; diet, arrow-root, milk, &c.; in addition, bowels moved during the night.

Friday. Pulse 112; no motion since yesterday morning; free from pain; half a drachm of powdered rhubarb to be taken immediately.

Saturday morning. Pulse 108; profuse perspiration; no pain; the rhubarb operated once. Infusion of roses, one pint; diluted sulphuric acid, seventy minims; honey, half an ounce. Mix. Three table-spoonsful to be taken every four hours, mutton-broth, &c.

Sunday morning. Had enjoyed the broth very much; slept well; pulse 90. From this time, she went on rapidly improving; and when I called at the end of the week, she was busily engaged in her household affairs.

J. T., aged twenty-three years, was delivered of her first child early on Monday morning, after an easy labour. When I visited her on Tuesday afternoon, she informed me she had had a shivering fit, succeeded by heat, a few hours before. She now complained of violent pain over the whole of the abdomen, and could not even bear the pressure of the bed-clothes; abdomen considerably distended; knees drawn towards the abdomen; cough; great heat over the whole of the body; tongue dry; pulse 130 in the minute, and sharp; lochia suppressed. Bled her from the arm to twenty-six ounces in the recumbent posture, when syncope was produced, which continued for some time. Submuriate of mercury, twenty-six grains; opium, four grains; make into six pills; one to be taken every four hours, until the mouth feels sore. L. ol. terebinth. ʒiss; a fourth part to be taken every six hours in a little mint-water; her diet to be tea, toast, and water, &c. Saw her five hours after the bleeding; felt relieved, but still a little pain upon pressing the lower part of the abdomen; pulse 115; proposed another small bleeding, but could not obtain the consent of her friends.

Wednesday morning. The turpentine had operated violently; no pain in the abdomen; pulse 112; cough left her. In the evening, pulse much the same; tongue rather moist; has taken all the pills, but the mouth was not affected in the least. Calomel, gr. v.; opii pulv. gr. i.

Thursday morning. Gum felt rather sore; pulse 100, and soft; slight perspiration; no pain; tongue moist; the pills to be discontinued; allowed her a little milk and arrow-root, in addition to her diet.

Friday morning. Pulse 98, soft; perspiring freely; no pain; bowels not open since Wednesday night. L. pulv. rhub., ʒss., to be taken immediately. Mutton broth, &c.

Saturday. The rhubarb procured one motion; felt much refreshed with the broth. From this time she went on rapidly improving.

If we compare the treatment of puerperal fever at the present time, with the practice that was employed between the year 1765 and 1775, in Derbyshire, by the late Dr. Butler, the difference will be found to be very striking: that gentleman says, "that bleeding ought never to be resorted to, unless complicated with inflammation; and even in these cases, bleedings of three ounces were sufficient; that the best remedy

was ten grains of rhubarb, and ten of cordial confection, every day, till the stools became natural; and that this mode of treatment never failed." Should the gentle mode of treatment never be adopted, I think I may positively assert that peritoneal or puerperal fever would rarely, if ever, be treated with success; and I think it may be very fairly inferred, without any deterioration of the character of Dr. Butler, that he never had, in his great extent of practice, seen a single case of real peritoneal fever, though something nearly resembling it. In the year 1787, puerperal fever raged in London. Dr. J. Clark says, "bleeding was injurious; leeches to the abdomen were useless; emetics were hurtful; bark and cordials, though indicated by debility, were inefficacious. Dr. Lowder, who lectured about thirty years ago at the medical school of Guy's Hospital, relates two cases which were cured by taking a gallon of the decoction of bark daily. Latterly, according to Dr. Armstrong, every patient who was not bled at the commencement, died; in Dr. Lowder's time, every patient who was bled, died. Now, had the same plan of treatment been adopted with Dr. Clark's patients as recommended by Dr. Armstrong, I believe the results would still have been unsuccessful; for the former appeared under a specific or malignant type, accompanied with great depression of the animal powers, with a pulse beating 160 or 170 in a minute, small, and soft. In these cases, death not unfrequently takes place in twenty hours. "Do what you will," said my worthy and much-esteemed preceptor, Dr. Blundell, "the patient will die." The free use of the lancet is, in such cases, death. Mercury and turpentine are the best remedies; but, in the less severe form, a little blood may be taken. Whilst, in the latter, the fever was simple, attended with inflammation of the peritoneum, which, if attacked at the onset by bleeding, and the free exhibition of mercury, will, in general, prove successful; for bleeding early and freely in this form, is a *sine qua non*. The two cases I have related were evidently of the simple form; and by the active treatment adopted, recovered. The efficacy of calomel in the latter case, particularly, was very striking; for, until the effect of the mercury was visible upon the submaxillary gland, (where it first shows itself,) the pulse still bore an inflammatory character, but which immediately subsided when the mouth became tender.

I beg to apologise for occupying so much of your valuable space, and the reader's time; and conclude by quoting Dr. Armstrong's observation upon the efficacy of mercury: "In a very few of those cases in which I gave calomel as a purgative, the gums became sore, and these recovered with unusual celerity." I have the honour to be, Sir, your obedient servant,

W. DUTTON.

34, Castle Street, Holborn,
Oct. 19, 1829.

CASES DEMONSTRATIVE OF THE EFFICACY OF THE ERGOT OF RYE.

By T. CALVERT GIRTIN, *Esq. M.R.C.S.*

BREVITY, Sir, should ever characterise those productions which are deemed worthy of insertion into your valuable periodical. Acting upon this principle, I have submitted to your observation, and to the notice of the profession generally, a few cases indicative of the great therapeutic agency of the secale cornutum, in further corroboration (if any be wanting) of the vast body of evidence now on record, relative to the efficacy of this remedy. I wish to observe, that the ergot of rye made use of on all these occasions, has been in my possession nearly *four years*. This substance has been supposed not to keep well; and a short time ago, in one of your Numbers, a communication was made upon the subject, in which it was said, that it would not keep good more than *twelvemonths*.

Mrs. B——, mother of six children, taken with labour in the usual manner, continued about four hours, when the pains gradually and completely subsided. Os uteri dilated larger than the circumference of a dollar. Ergot in powder, ʒss. administered, which in twenty minutes produced a pain, shortly followed by another, and in half an hour, with consecutive increasing pain, the child was born. Placenta expelled in a short time, and the patient did well.

Mrs. K., mother of two children; pains began about eight in the evening; continued steadily improving till about one, when they slackened, and continued feeble and ineffective for three hours, the child making no advance, and the os uteri well dilated. Ergot given in powder, grs. xxv.; in 10 minutes a decided improvement had taken place, the pains powerfully increased, and the child was born in forty minutes from the administration of the powder. Placenta came away naturally, and the case terminated well.

Mrs. C. The patient had five children, and on the birth of each, had suffered severely with lingering and complicated labours. Was of a consumptive habit. About the time she had reckoned upon being delivered, was seized suddenly with a profuse hæmorrhage while making water. The chamber-pot was filled with blood in an instant, and the bleeding continued in a mitigated stream till my arrival. Cold appli-

cations to the vulva had a partial effect in allaying the hæmorrhage, but a full dose of the ergot, (℈ij. by guess), in addition to the external remedies, completely checked the flow of blood, and brought on slight pains, which speedily improved to forcible and effective uterine contraction. The progress of parturition went steadily on for three or four hours, when the mouth of the womb, being dilated to the size of the brim of a tea-cup, the pain almost entirely went off. Ergot, ℈j. in powder, brought the labour to a speedy conclusion; in an hour after its exhibition, the fœtus and placenta were expelled. Case terminated favourably at the time, though the mother has since died from pulmonary consumption.

Mrs. R., at her first labour, was delivered of twins, which proceeded as usual. On the second occasion, the uterine efforts were feeble, and at long intervals throughout, and so continued for many hours, without any corresponding advance of the child commensurate with the open state of the uterus. A moderate dose of ergot improved the pains in frequency, though not in power, and in an hour after the first administration, a second dose, the same quantity as the former, was given; this in twenty minutes produced a full stimulant effect, and from that time the parturient efforts continued steadily till their final termination, in fifty minutes from the second dose of the secale. A favourable getting-up followed.

Mrs. L., mother of four children; the pains in this case were sharp and lancinating, attended with much abdominal uneasiness, yet with but slight propulsive efforts. The os uteri being soft and readily dilatable, ergot ʒss. was given; in twenty-five minutes the character of the pains had altered, a strong bearing-down action was excited, and in an hour and a half, both child and placenta were delivered. The patient did well.

Mrs. N. First labour; the character very similar to the last. A moderate dose of ergot, a beneficial and speedy termination. This case did favourably also.

Mrs. P. First labour. Liquor amnii discharged before uterine pains commenced, in consequence of great bodily exertion. Pains, when they came on, feeble, and productive of much abdominal distress, continued many hours without advancing the labour. Ergot, ʒss., had the effect of permanently improving the uterine efforts, both in force and duration. Os uteri freely dilated, and the head progressed. This afterwards proved to be a case of arrest, and injurious consequences to the bladder being feared, delivery was completed with the forceps. The child, from its appearance, had been dead some days, being somewhat putrescent. The mother had no untoward symptom during the month, with the exception of headach, to which she was very subject.

Mrs. W. First child; labour pains sharp, but not propulsive, continued some hours; os uteri readily dilatable; ergot, ʒss. in powder, produced in half an hour forcible contraction, and in two hours after the expulsion of the fœtus and placenta was accomplished. Case did well.

Mrs. T., mother of three children. Child born before my arrival; placenta came away readily, and in an hour after, hæmorrhage supervened. The flow of blood was copious, though not violent, and the quantity lost on the whole was considerable. Cold applications to the vulva produced but trifling, if any effect. Ergot, ℈ij., was given in powder, and shortly after, the hand introduced into the uterus. Uterine contraction at first very feeble, but in ten minutes after passing up the hand, and fifteen from the time of administering the ergot, the contraction was firm and powerful, the hæmorrhage rather speedily decreased, and in an hour the woman was safe.

In none of these cases, nor in others which I have met with, have I seen the least injurious effect produced upon the child. I mention this, because it has been asserted, that bad consequences to the infant frequently follow the exhibition of this powerful drug. I have never witnessed any in my own practice, nor in the circle of those professional friends who have favoured me with opportunities of investigating this matter.

EXTRACTION OF A BREECH-PIN FROM THE ORBIT.

To the Editor of THE LANCET.

SIR,—The perusal of a case of "Extraction of a breech-pin from the orbit," recorded in your Number of the 10th instant, brought to my recollection one of a similar nature, which fell under the care of my late respected master, Richard Moyle, Esq., of Penzance.

The accident happened prior to my entering with him as a pupil, but I remember the patient's coming to the surgery in the year 1813. I believe Mr. Moyle extracted the piece of iron a few hours after the explosion had taken place. It consisted of the entire breech-pin with the screw, two inches in length, which secures it to the stock, and which you are aware passes off at right angles from the pin itself. The whole of

this substance, weighing, I should suppose, nearly four ounces, was buried amongst the bones of the face, immediately below the orbit.

I will not, however, anticipate the account which, I have no doubt, Mr. Moyle will readily give in an early number; and being himself an excellent draughtsman, he will have no difficulty in furnishing you with a diagram. I am, Sir, your obedient servant,

FRANCIS BROWN LLOYD.

13, Oxford Street, Liverpool,
October 14th, 1829.

IMPROVEMENT OF THE PROFESSION.

To the Editor of THE LANCET.

SIR,—I have been rejoiced to observe in your Journal, several letters on the subject of farming parishes and clubs, and a prospectus for forming a New College of Surgeons, which, I think, may be so regulated, as most effectually to advance the welfare of the profession, and may be the medium of forming a benevolent fund (as projected in No. 312) for the relief of distressed members and their destitute widows and orphans.

The letter signed "A Country Apothecary," in No. 311, points out, alas! too truly, the hardships to which the poor are exposed by the vile system of farming parishes, the degradation of the profession, and the means of restoring its members to that rank in society they ought to hold. I will class myself with the οι πολλοι, and say we are the only persons to be blamed for thus speculating. He who offers to physic the poor for the lowest annual stipend, is the person selected for "parish doctor," causing contention between the neighbouring practitioners, and cancelling that friendship, than which nothing can be more desirable in a village, when, in cases of emergency, it may be necessary to send many miles for a second practitioner, even when the loss of time in doing so may prove fatal, because of the animosity that exists between two who reside on the spot. In such cases, I say, humanity should be uppermost, and *that* dictates unanimity in a body of men who fill, or ought to fill, an exalted and useful station in society, and the observance of which is the only mode of securing reputation in its members.

The necessity of a new college must be apparent to every discerning mind, and all who wish well to the undertaking, are urgently called upon to suggest plans to be subjected to a committee, or argued at the meeting proposed to be held; and it is under this impression that I presume to address my medical brethren, entreating them to join hand and heart to promote this most desirable of all objects. As an individual, I entirely concur with the projected scheme for forming a new College upon such advantageous principles, and whenever it is carried into effect, will not be backward in appearing in *propriâ personâ* to support the measure, and contribute my mite. I would, however, before it goes further, and with the view of exciting others to do the same, throw out two or three hints on the subject of a benevolent fund. It might be decided, first, that in addition to the money to be paid on being admitted a member, the sum of one guinea annually be contributed towards such fund by members whose age at the time of admission does not exceed twenty-five years, and that for every fifth year above that age, when admitted, there shall be an increase of half a guinea. That out of this fund such sums be granted to widows and orphans, as can be apportioned without endangering the fund. That the relict of any member, whose property in the right of her deceased husband shall be an equivalent to a certain sum per annum, shall not receive benefit from the funds. That in cases of unavoidable distress, a weekly allowance be made according to the urgency of the case, after proper inquiry shall have been made. On the subject of the College, I should think it proper that a monthly meeting should be held in London, for the purpose of publicly examining and admitting members. That there should be quarterly meetings held in London, and district meetings in all principal towns in the kingdom, the provincial meetings to take place in the early part of the month, and the London, or grand meeting, in the latter part of it, that the provincial secretaries may be enabled to transmit to the metropolis the transactions of the provincial meetings. A statement of the College affairs should be annually printed for the inspection of all the members. At every quarterly meeting, the members should dine together, after the business of the day is over, each member defraying his own expenses. This regulation may be considered unnecessary, but, in my opinion, it is obviously a desirable object to bring together, as often as convenient, medical men who may live within a few miles of each other; by so doing, their feelings and sentiments would be harmonised, unanimity be obtained, information extended, and their respectability increased; and it would tend to do away with that illiberal competition which has become so general and so ruinous. We should then hear no more of farming parishes at an average of sixpence a head per annum, and clubs at two or three shillings. Indeed every member, on admission to the new College, should be required on oath, not to be guilty of any act which shall be consi-

dered derogatory to the profession, and to observe a regular charge for attendance.

Should some such plan as I have submitted be adopted, applications might be made to the different provincial medical benevolent societies, requesting them to combine their funds, and support the general interest of the profession. I have the honour of belonging to the Essex and Hertfordshire, from the rules of which, I venture to suggest, hints might be obtained for the formation of a society upon an extended scale. The state of the society's funds for the year 1827, was as follows:—

Receipts.

	£	s.	d.
Balance	80	13	3
Dividends	165	5	4
Subscriptions and donations,			
Hatfield district	82	8	6
Colchester ditto	51	9	0
Bishop Stortford ditto	55	11	0
Chelmsford ditto	34	12	6
Ilford ditto	82	19	0
	£552	18	7

Disbursements.

	£	s.	d.
Annuities at the General Court of Auditors	356	0	0
Stamps, &c.	29	5	6
Printing	15	10	0
Secretary's salary	20	0	0
	420	15	6
Balance	132	3	1
	£552	18	7

The yearly subscription to this society is one guinea, and the entrance two guineas. The annuities, as above, are distributed to fifteen widows and eleven orphans; to the former, averaging from 16*l.* to 22*l.* per annum, to the latter, from 5*l.* to 10*l.* I am, Sir, a devoted well-wisher to the profession, and

A Constant Reader.

PRICE OF SUBJECTS.

To the Editor of The Lancet.

Sir,—As you always evince considerable zeal in ridding the profession of nuisances, an apology is at once provided me for trespassing upon the pages of your valuable and corrective Lancet.

During the autumn and summer just ended, as well as the preceding summer and autumn, the price of subjects procured from the resurrection-men was low, so that my pupils bought several, about a month or two ago, for two, three, and four guineas apiece. The subjects would continue to be obtainable at a price nearly as low during the whole of the present coming winter, had it not been for the unfortunate occurrences which I am now compelled, for the good of the pupils at large, to mention.

A few days ago my pupils bespoke a subject from the resurrection-men, which they were to have for six guineas; instead, however, of the subject being produced, the resurrection-men appeared without it, stating, that as Mr. Stanley and Mr. Mayo had offered twelve and fourteen guineas, they could not possibly part with subjects to any pupils at a less price; and that as these gentlemen, just alluded to, had already voluntarily offered so high a price, they (the resurrection-men) had no doubt of getting twenty guineas apiece for subjects from them during the coming winter.

I have also been repeatedly informed, by many pupils, that one of these gentlemen offered twenty guineas apiece for subjects last winter, which was then the immediate cause of the elevation of the price.

I have no reason to mention the names of these gentlemen but with sentiments of respect, abstractedly from this affair. I only wish that neither they, nor the profession at large, should be the dupes to the impositions of the resurrection-men. My object in writing this letter is to ask these gentlemen whether they, or their dissecting-room deputies, have really offered such high prices? and thus been the cause of raising the price of subjects, and of increasing, beyond bounds, the nefarious traffic and profligate demands of the resurrection-men; if so, less cannot be said than that they thrust a dagger into the breast of science, and act most inimical to the best interests of mankind.

Such a plan is a specific encouragement to Burking, for a resurrection-man will allow no scruples of conscience to obstruct his getting money, consequently if he want money, and cannot procure subjects from churchyards, owing to their being well guarded, he will get money by procuring subjects by other means, too bad to be mentioned, but unfortunately well understood, without further explanation; especially when he can get so large a sum as twenty, or fourteen guineas for each; for in a ratio to the gain, so is the inducement to commit crime. But the chief part of the blame rests with the lecturers; if we are exorbitant in our offers, and give the resurrection-men the staff of control (as to the price) out of our own hands, we cannot blame them for accepting such offers, and making their demands accordingly.

For the sake of the pupils' pockets, the lecturers should adhere to some fixed and moderate price for subjects, and be determined to give the fellows no more than is consistent, till Government provide such means as shall

administer an IMPARTIAL and proper distribution of subjects to *any surgeon* who may absolutely require them. This Government must do—nature cries aloud for it!

I am, Sir, your obedient servant,
G. D DERMOTT.

Theatre of Anatomy, Westminster
Dispensary, Gerrard Street, Soho.
October 23, 1829.

WESTMINSTER MEDICAL SOCIETY.

Saturday, October 17th, 1829.

THE first meeting of a new session (the twenty-first) was held this evening, Mr. C. HAWKINS in the Chair. The preliminary business of a new session was gone through, and Dr. Granville and Mr. Bacot were elected presidents. The new committee consisted of Drs. Stewart and Sims, Messrs. Wade, Burnett, Samwell, and Pettigrew.

As it is the custom of the members to lose no time in their proceedings, Mr. Hunt occupied the earliest interval between the balloting and scrutiny, by relating a case of diseased lungs, the particulars of which he promised to complete, by exhibiting the morbid parts to the members on the next evening; but it usually happens with these half-related cases, that they excite no interest, and are never again introduced. The remainder of the evening was chiefly occupied by Mr. Thomson, junior, with a description of a new mode of putting up morbid preparations, and which, as the hints are of a valuable and practical nature, we report at length.

ANATOMICAL PREPARATIONS.

Mr. THOMSON. Will you allow me, Mr. President, in the absence of business of more interest to the general body of the Society, to offer a few remarks on certain alterations which I have lately been induced to make in the art of putting up anatomical preparations. I believe I may say that I have now succeeded in removing the two great annoyances of the preparation-maker, *the loss of the colour of his specimen*, and *the evaporation of his spirit*; I am the more induced to trouble you with my process for accomplishing the first of these desirable objects, as it has not only been approved and adopted by Mr. C. Bell, but highly recommended by him to the notice of his pupils. It is now about five years since, after delineating the appearances of emphysema in the lung of a horse, that I accidentally threw the dry and almost useless specimen into strong alcohol; to my no small surprise, I found, that, in the alcohol, the preparation showed out most of the pristine vigour of its hues. Profiting by the hint, I made a series of experiments, which led me to the conclusion, that the colour of the blood may always be preserved in the vessels of any surface, provided only the surface be dried sufficiently to allow of the transudation of all the serum from the vessels, and the complete setting or formation of the clot. There is some difficulty, however, in getting the preparation dried with sufficient rapidity; and in order to facilitate this, it is found useful never to put the preparation into water, but to wipe off all the blood and serum, &c., with a dry spongy towel, to hang the preparation, properly disposed by the aid of strings or threads, in a current of air, and, from time to time, to wipe off all the serum that may transude from the vessels. It is necessary thus to dry the preparation; because, if it be allowed to hang with the transuding serum on its surface, the colouring matter of the blood is destroyed, whether owing to the chemical changes effected on the serum by the atmosphere, or by the water converting the sesquioxide of iron into the peroxide, I cannot distinctly say, although I am inclined to attribute the influence to the agency of the latter cause. It is not, however, clearly decided in what state the iron exists in the blood, although Dr. Englehart has, beyond doubt, demonstrated that the colouring matter of lues is due to the presence of iron. Dr. Turner considers it probable that it exists in the state of oxide, and seems to hint that it may be combined with the sulpho-cyanic acid, the existence of which has been lately traced in the saliva. Whatever be the nature of the chemical change, we know that the serum itself will destroy the colour of the blood, and that water will do so, much more readily. Hence, even after the preparation be dried, if it be plunged into water, or into alcohol of specific gravity, under 8.30, it loses the colour of its blood. The strongest alcohol that can be procured, is the best preserver of the colour in the preparations so got up. I have specimens, Sir, prepared in this manner, which, after an interval of five years, are as fresh and beautiful as when first prepared. It is superfluous to point out the great power of communicating his information, which the morbid pathologist requires from this simple artifice. He is enabled to exhibit inflammation in every stage, from simple turgescence of vessels, to the period when new ones are being formed for the purpose of organising the inert matters dropped from the fractured extremities of the old. He can distinctly show the form of vessels by which surfaces become connected, and all the actual appearances which the progress of morbid change develops. In order to prevent the evaporation of the spirit, we have only to seek for the same means by

which the preparation may be supported independent of strings passed over the lip of the jar, and by which the pores of the bladder may be closed. To secure these objects, all the artifices hitherto employed are well known, and already used in this country, excepting that of M. Soemmering, and that which I propose detailing to the Society. M. Soemmering has the lip of his jar ground and fitted to it, by grinding a flat piece of plate-glass. He supports his [preparation by a bubble of glass containing air, or by having a bar supported on a ledge cut for the purpose on the neck of the bottle. He fills his bottle, and then, by heating it after the preparation is nicely adjusted, raises some of the spirit into vapour, and thus expels the air from the bottle. The glass lid, previously greased with a little ointment or cerate round the margin, is now placed over the mouth of the bottle, and held firmly down till the spirit is cooled, and permits the weight of the superincumbent atmosphere to operate in keeping the lid *in situ*. To this plan, which I have found very well suited to the purpose, I still wish to urge two objections. In the first place, the cerate or grease used is partly pressed inwards, and becoming, from this circumstance, diffused, by the shaking of the bottle in the spirit, renders the fluid dull and dirty. Then this apparatus is somewhat expensive, inasmuch as each lid, with the grinding, costs a shilling. To obviate these objections, I support my preparation by hanging it from a thick piece of cork (the cork cut by the French for lining the soles of shoes) which floats upon the top of the spirit; I tie this over with bladder, and allow the bladder to dry; I then put over this a thick layer of a mixture consisting of equal parts of dragacanth and gum acacia, which must be allowed to dry perfectly. Over this I put a thick layer of coach varnish; and on it, when dry, pour melted simple cerate. I now have a piece of tin plate of the size of the top of the preparation, which being heated and pressed on the cerate, makes for itself a uniform and level bed, so that any pressure on the tin will be equally exerted on all the subjacent parts. This is covered with another bladder, and the whole, when dry, is varnished. This mode of capping the preparations not only prevents evaporation, but permits of a flat, and therefore a neater top. I regret having taken up so much of your valuable time, but I was unwilling to keep to myself, hints which I hope will prove as valuable to others as they have already to me. Some specimens which I have preserved in this manner, I will bring to the Society on the next meeting. (A second promise made on the same evening, which was subsequently forgotten.)

Saturday, October 24th.

Professor THOMSON in the Chair.

HERMAPHRODISM.

Mr. BACOT related a case which gave rise to a discussion on the nature and existence of hermaphrodism; in the case in question, the formation of the genital parts caused the approach to hermaphrodism, to be more perfect than in any other being with which the relator had become acquainted. The deformity was discovered in consequence of the party having accompanied a man into a house of ill fame. The propensities thus disclosed were regarded, generally, as decisive of the sex. Connected with the parts, however, was an appendage so like the testes, that Mr. Bacot said he had no hesitation on looking at it, to pronounce it to be such. The projection of the clitoris was very great; the vagina was well marked and deep. No emission had been known during the fits of excitement to which the deformed had been subject, and there had never been any menstruation. Excepting in the development of the mammæ, the hermaphrodite bore all the appearances usual to the head and bust of a female. Mr. Bacot considered the case as very closely allied to perfect hermaphrodism.

The existence of such a state in the human species was, however, generally disputed. The president thought, that the only test of its reality, whatever might be the structure, was the existence of the propensities of both sexes in the one individual. Reference was made to several cases of supposed hermaphrodism, amongst which was one that occurred a few days since at Guy's Hospital. The patient was admitted as a female, labouring under an attack of fever, but who exhibited all the robustness of frame usual to males. The disorder proved fatal, and the following appearances were disclosed after death:—

"A body analogous to the penis was observed immediately beneath the pubic arch; not free or pendant, but bound down towards the perineum; its length was about two inches and a half, and it terminated in a somewhat bulbous extremity, a little like the glans, but without the usual delicacy of cutaneous organisation, without any perforation for the urethra, and without a prepuce. On each side of this body there was a considerable fulness of the integuments, at first view resembling the female labia, but in reality analogous to the male scrotum, as, like it, they contained each a small testis. This separation into its two halves, of the scrotum, depended on the penis being bound down in the median line, as previously described. The testes were in size like those of a boy six or eight years old, and were connected with the vasa deferentia, which were found pervious, and considerably enlarged

towards their termination. The vesiculæ seminales were very small; the prostate gland also was remarkably small, and was covered on its sides by a pair of peculiar muscles passing from the rectum to the neck of the bladder. The urethra terminated in the perineum, about one inch from the end of the supposed penis, and half an inch further there was a blind opening, which fancy might call the rudiment of a vagina, but which was probably nothing more than an enlarged lacuna. The tunica vaginalis was continued some distance up the chord, but at the ring was quite closed. There was a very minute trace of cremaster muscle. The pelvic viscera had no female character whatever, and the formation of the pelvis itself approached to the male rather than to the female standard. The mammæ were considerably developed, but would have been thought small for a healthy female. The lips and chin were clothed with a few scattered irregular curling hairs, not more than are often seen on aged females. The outline of the figure, in its muscular development, squareness, and largeness of limbs, &c., was decidedly more male than female. The cerebellum was natural in structure, and if it differed at all from the usual development, was rather small, but this was by no means distinct. No other peculiarities, either diseased or congenital, were observed. In the former part of her life, this hybrid assumed the dress and habits of a man; at one time working in a brick-yard, at another period acting as a groom, then as a milkman, and she afterwards kept a green-grocer's shop. Her habits and manners were rude and bold, sometimes indicating a degree of derangement; more than once she engaged with success in pugilistic encounters; and, it is said, manifested still less equivocally male propensities. For the last seven or eight years she has appeared as a female, calling herself Mary Cannon."—M.

The discussion that ensued involved many contradictory opinions, and being chiefly theoretical, we afford our space to the following cases of

HÆMORRHAGE FROM THE LINGUAL ARTERY,

Arising from ulceration of that vessel, the bleeding from which was stopped, first by pressure and subsequently by ligature of the carotid, by Mr. Mayo, at the Middlesex Hospital.

Mr. Mayo stated, that the patient, a man thirty-five years of age, was admitted with an attack of quinsey. Six weeks after the inflammatory attack had subsided, it was discovered that an abscess was left about the tonsils, which often discharged. For a time it remained indolent, but, shortly after, a profuse discharge of blood took place; this discharge was not checked by remedial means; it stopped spontaneously. In a fortnight another discharge of blood supervened from the mouth and abscess, which was at the angle of the jaw, and the state of the patient became very dangerous. The hæmorrhage was checked, but fearing its recurrence, he determined upon tying the carotid artery, not knowing exactly whence the blood flowed, but under an impression, that by so doing he should effect a cure; the operation, however, was not performed, and in about fourteen days the bleeding again returned. The result, in the present instance, was, that before the artery could be tied, the man expired, choked by the bleeding. On opening the body, four ounces of blood were found in the trachea, and on further examination, it was discovered that the abscess in question, which was below the tonsil, had divided the lingual artery, and that from that opening the hæmorrhage had arisen. On Monday evening last, another patient was admitted to the hospital, under similar circumstances, having lost a considerable quantity of blood from the throat. There was no immediate alarm, and the patient was put to bed, and seen by the house-surgeon. He had had a sore throat for four months previous, which was supposed to be syphilitic; for this he had taken a little mercury, which was discontinued for a time, when he again took a few pills, though for two months to the present period he had taken no mercury whatever, as he appeared to be mending. On the Tuesday morning after his admission, the hæmorrhage recurred to a violent extent, and the man lost as much as two quarts of blood before the house-surgeon could arrive. The first step was, to apply pressure over the carotid artery, and the effect of this was, a stoppage of the bleeding. When Mr. Mayo saw the man, however, he was on the brink of death. As pressure over the carotid had checked the hæmorrhage, he thought it proper immediately to tie that artery; the patient was accordingly brought to the light. On the right side of the fauces a clot of blood was discovered; the left was free; the ligature was applied; it proved successful; medicine was ordered to heal the ulceration, and the man went on well from that time. The tonsil was found to be destroyed, and the pharynx was included in the destruction; the disease, however, was mending; the man thought his throat less sore, and his strength was gradually returning. There was one point in this case which Mr. Mayo thought particularly worthy of notice. On tying the artery, he inquired of the patient whether his sight was affected? The reply was, that a dimness had come over the right eye. He left him for a couple of hours, and on again visiting him, found he could see better with that eye. By the same

evening the man could see distinctly, and a pulsation was discernible in the facial artery. In this last case, he supposed that the hæmorrhage was from the same vessel as in the former, and he had since learned, that before the hæmorrhage had occurred, the soreness of the throat was situated in the angle below the jaw, exactly at the point in question. Since the operation, he regretted that he had not performed it in a different manner. In such another case, he should certainly expose the carotid at the point at which it branches. He considered it would be more permanently effectual; as it was, he had tied it where the hæmorrhage appeared to indicate the necessity of the ligature.

The relater was asked whether this was a case in which, after the severe bleeding, he would have resorted to transfusion to save life.

Mr. Mayo said the man was certainly very far gone. The jugular vein was almost empty; it was uncoloured by blood, and did not swell to its usual dimensions; he fell back, his eyes were upraised, and the pulse was hardly to be felt; he was brought round again by the use of ammonia and brandy. He had contemplated the employment of transfusion; and a friend, who was present, had a perfect instrument for the operation (Dr. Blundell's gravitator); and, in case of extreme necessity, he should have resorted to it. But, generally speaking, it was in extreme cases alone, that he should seek the benefit of this desperate remedy.

The subject led to some further remarks on transfusion, when the advantage of applying ligatures to the upper extremities of the body, during the operation, was suggested by Mr. North, with a view to economising the action of the heart.

At the close of the debate, the President related the following case in proof of the

EFFICACY OF IODINE IN OVARIAN DROPSY.

Dr. Thomson considered it, though a solitary one, to be a case of great interest. A woman applied at the dispensary, two or three months since, with diseased ovary; and, on examination, a great accumulation of fluid was found to have taken place. For the removal of this, he proposed the customary tapping; but as he knew, from experience, that when performed, it seldom did more than relieve the system from the pressure of the fluid, he resolved to follow up that operation, by administering iodine to its full extent, in the hope of effecting a permanent cure. The tapping removed seven quarts of albuminous serum, mixed with pus. Two or three days after, when the constitutional disturbance had become allayed, he commenced with the iodine, which he carried to the extent of thirty-six drops to a dose, administered three times a-day. The result was, that the tumour wholly disappeared, there was no symptom of its return, health was restored, and the woman was discharged perfectly cured. The dropsy was of two or three years standing. This case he considered worth attentive consideration. In resorting to the iodine, he had reasoned thus. He knew of no stimulant the influence of which was so perfectly general; he had detected it in the urine of patients to whom it had been given; its great influence appeared to be exerted on the glands; and as the iodine attacked all the glands indiscriminately, he had presumed that it was carried into the circulation, and would have an especial effect on the ovarian gland; there appeared to him, indeed, to be something specific in the action of the iodine; and he hoped to diminish the vitality of the gland, that by tapping and diminishing the vital power of this new growth, he should be enabled to exert a greater influence over it.

A member inquired whether the iodine affected healthy as well as diseased glands.

The President said that, in the present case, it appeared to have no effect on the viscera, or any of the other glands. In cases in which the iodine had been given very freely, he had known the healthy testicles become nearly absorbed. With regard to the quantity of iodine which it was proper to exhibit at one time, the dose ought to be increased gradually. The stomach, which would otherwise reject it, would, by a gradual exhibition, admit of the iodine being increased to fifty minims three times a-day.

Dr. Webster stated, that he had a similar case in which he should make trial of the iodine, if Dr. Thomson would see the patient with him. She had been tapped five times; the last, two days since.

A paper on hysteria, from Dr. Stewart, was announced for the next meeting.

WORM IN THE FRONTAL SINUS.

Mr. Rhind has given an account in the *Journ. of Nat. Science*, of a worm which was lately found by Mr. W. Browne in the frontal sinus of a sheep. The animal was about two inches in length, three eighths in breadth, and of a cream-white colour. "It is certainly a singular question, and one of some interest," he observes, "how this has been generated in this situation. It is a cavity, one would imagine, completely excluded from all extraneous communication; and if any circumstance could favour the idea of spontaneous or equivocal generation, this is certainly a strong one."

THE LANCET.

London, Saturday, October 31, 1829.

The capability of the ticket-system, for the production of those evils which we repeatedly apprehended would be the consequences of its operation, has been well illustrated by the Edinburgh College of Surgeons, and in a manner at once fearful and ludicrous. If we mistake not, this learned Corporation has, in its late regulations, made the boldest advance towards bringing that pernicious system to the *reductio ad absurdum*, by which it must be ultimately overturned. Between the sublime and the ridiculous, a great man has observed, that there is but a step: the Edinburgh College, we imagine, has proved the truth of the observation by actual experiment. We certainly do not regret that this mock-heroic feat in corporate legislation, has been achieved by an institution, whose character so happily coincides with the folly of the full exercise of the principles which it has carried, in the present instance, into practical extravagance. When the world is to be taught the errors of a favourite doctrine by its effects only, the sooner they are manifested, the better for society. The Edinburgh College of Surgeons, as most of our readers are aware, has been generally looked upon as the least respectable of our professional establishments. It had many of the vices, without some of the virtues, of its celebrated contemporary of Aberdeen; for while it exacted the presence in its halls of candidates for license to practise, it conferred diplomas on terms of almost equal facility with its rival, which dispensed them by post; thus, by a semblance of examination, giving an universality to those abuses, which the other restrained, in some measure, within narrow limits, by the contempt which its undisguised venality excited in the public mind, for the utter worthlessness of its degrees. It became the general resort of all those aspirants after professional honours, whose pecuniary and intellectual resources shrunk from the exactions and scrutiny of the more expensive and rigorous examiners of the other British medical and surgical corporations. Surgeon's Square, in short, was well known as a sort of *refugium peccatorum* to the ragged and rejected of the medical tribe, who there found a balm for their woes in a prostituted diploma, with which they were to make their way through life in foot regiments and his Majesty's marines. But lo! Harlequin has doffed his jacket—Dobson has thrown aside the stirrup and lapstone—the butterfly emerged from the humble raiment of the grub, basks its glittering wings in the very noon-tide of popularity; and we can now no more recognise the old College of Edinburgh in its novel dress, than we could hope to discover the cobbler's apron in the Persian banner, studded with gems and bedecked with gold, or their own old "blue blanket" among the modern civic paraphernalia of "Auld Reekie." At one bound it has ascended from the very zero, to the boiling point of superiority on the scale of professional respectability. Not only does it now tower in the plenitude of solemn pretension above all its surgical contemporaries; but (oh! how shall Jemmy and Roderick, Roderick and Jemmy, bear the horrid profanation?) it has actually placed the venerable British universities beneath its feet, if we are to measure the dignity and learning of such institutions by the length of a "curriculum," just issued from the "flat" in Surgeon's Square. Different persons, no doubt, will explain this extraordinary metamorphose in different ways, while others will hail it as one of the most important improvements in corporate ordinances, after the recent regulations of the Worshipful Company of Apothecaries. For our own part, we feel no difficulty in accounting for the transformation,

and as little in speculating on its consequences and utility. The ticket-system furnishes an unerring clue to the mystery; for by this happy scheme, the means and motives for raising each above its neighbour, at the expense of an advertisement, are furnished to all the Colleges of Surgeons in the British empire. They have merely to call together their councils, add the obligation of attendance on a few more courses of lectures to their scheme of "education," and, with the Peri in Paradise, exclaim, at the conclusion of their labours:

"Joy, joy for ever! our task is done,
The gates are passed, and heaven is won."

It was, of course, a thing not to be borne by human flesh, and could not, therefore, be tolerated with patience by the Royal College of Surgeons of Edinburgh; that it should be distanced in *curricle* race by Apothecaries' Company of London, or its junior rival of the Irish metropolis, which has also exhibited some ambition lately for excelling in this corporate recreation. Excited by these rival examples, the Edinburgh College has started, and is, for the time being, the winner on the course of learned pretension. How long it may remain so, it is difficult to tell. London and Dublin are, we understand, at this moment in harness, so that we may fairly expect the Edinburgh College to be at the bottom of the list after the next heat. Thus are we doomed to a repetition of these absurdities, until relieved from them by some revulsion excited by their excess. Were these attempts, hollow and hypocritical as they undoubtedly are, likely to improve the actual condition of the profession, we should hold a different language towards them; but besides being dictated by the vilest prospects of gain to the parties who make them, we assert that they are not calculated to extend the qualifications of practitioners, while they are totally inapplicable to the state of medical society in Great Britain. By the wise-acres who manufacture these regulations, it would appear to be assumed, that pupils can as readily comply with them, as persons of the same caste in other countries. There never was an assumption more erroneous or unfounded than this. There is scarcely a village or an university on the Continent, in which any individual who chooses, may not have, first a classical, and, subsequently, a professional education, at an expense unknown in this country. In such states, it might not be unfair for the directors of the great national schools, to exact a compliance with any system of education, however comprehensive, which they choose to impose on students. They give them every facility for learning: they have every right to demand proficiency. In France, too, the country taken as an example by our lawmakers, the constitution of the Universities is totally different from what prevails here. There they form but one great seminary, directed by one great national council, which equalizes the expense and qualifications of students throughout the whole. The unity of this scheme secures the pupil against being harassed by the exorbitant charges, and oftentimes contradictory institutes, which characterise several independent bodies in this country, who make and repeal laws just as it suits their purpose. Here, with us, the reverse of all these circumstances prevails. Not a step in education, from the alphabet to the *summos honores* of our colleges, but must be made at the dearest rate. In addition to this disadvantage, we have, at least, some dozen of medical corporations of one kind or another, all contending for which of them shall extract the most money from its graduates, and put them to the greatest inconvenience by their illiberal statutes and by-laws. This is surely a state of things to which the continental system is totally inapplicable. Nothing, in fact, but the grossest folly, or the most perverse self-interest, could induce any set of men to attempt to introduce such a scheme into this country.

We grant that, even as things are in this country, were these regulations to assume another form, they would be eminently useful; but the *emphasis* of the enactments is obviously laid in the wrong place, for instead of being laid on the *qualifications* of the candidate, it extends only to the *certificates*. If the extension of the qualifications of British practitioners in medicine and surgery, be, for example, the real object of the authors of the regulations, why not at once say that candidates will be required to answer in such sciences as are required of them without any reference to the place or the persons where such knowledge was acquired? Were this obligation put forward, in these laws, exclusive of the production of certificates, we conceive it would answer all the objects (we mean of course the pretended ones) of the present plan, besides being applicable to the disadvantageous state of things existing in this country. Let this principle be but once acted on,—let pupils but learn where, under whom, and at whatever expense their means enable them to do so, and we care not how much learning or what qualifications may be demanded from them at their examinations. But no, the medical corporations of this country will never do this; their ambition, rivalry, self-aggrandizement, provision for their friends, relatives, dependants, and all that corruption and a vicious system have been generating for years, must first vanish before this honest principle of action can be adopted by them, or before pupils enjoy those privileges which its operation would unquestionably confer.

SKETCHES OF THE MEDICAL PROFESSION IN LONDON.

This is a fit undertaking for the accurate, classic, and poetic pencil of our excellent friend Erinensis, by whom, in fact, it will be commenced, and, we hope, accomplished.

A work of this description requires much time and labour. The artist has not only a great quantity of materials to collect, but he must have frequent opportunities of *seeing* his subjects; for, without being *seen*, many of them cannot be sufficiently admired. The accuracy and beauty of our friend's Dublin Sketches, have been the theme of universal panegyric, and his genius might seem to justify a speedy commencement of his graphic labours in this metropolis; but Erinensis informs us, that both animal painting and morbid delineations are somewhat new to him; hence, a careful study of the elements of both of these branches is indispensable. Thus qualified, the Owls, Bats, Oysters, Funguses and Excrescences, will incur but little risk of misrepresentation, or false colouring. As we are exceedingly anxious that the pallet of the artist should be well furnished for giving his various subjects their peculiar and almost numberless tints, we entreat those of our readers who are in a condition to supply us with any portion, however small, of *colouring material*, to transmit it forthwith to the office of this Journal. The private character of the Editor of The Lancet having been treated by his opponents with great delicacy, propriety, and truth, he is anxious to show his gratitude for so much kindness and liberality, in the only way by which its intensity can be displayed.

Subjects to be sketched;—Hospital Surgeons and Physicians: Authors, successful and unsuccessful; Editors; Ex-editors; Plasterers; Compilers; Dubs, and Hacks; Bats, learned, Cyclopean and Astonian; a Middlesex Owl, and one Oyster.

An account of any interesting circumstances connected with those *pretty* objects would be highly acceptable to the artist. Pedigree, professional relationship, electioneering anecdotes, and the means by which any bat obtained its first flight, will be deemed matters of importance.

Elements of General Anatomy, containing an Outline of the Organization of the Human Body. By R. D. Grainger, Lecturer on Anatomy. London. Highley. 1829. 8vo. pp. 525.

We cannot better commence our review of this useful and well-written work, than by extracting a few lines from the preface:—

"My object," says the author, "has been to convey a concise, and, at the same time, a comprehensive account of the several substances which form the human body. To the description of the different tissues, some observations on their uses are added, for the purpose of showing how admirably each structure is adapted to the functions it is destined to fulfil."

Of this junction of anatomy and physiology we highly approve; it renders both sciences more interesting to the student, and fixes the principles more firmly in his memory. Some of the physiological observations are, perhaps, out a little of place for an elementary work like this, especially those on the varieties, or races, of mankind, a subject which, indeed, belongs more properly to natural history than to physiology.

The general arrangement of the work is good, and the language, for the most part, clear and concise; but, for a practical anatomist, the author has given too much on the authority of others, and too little from his own observation and experiments. This appears, however, to have arisen more from diffidence than from any deficiency either of knowledge or of industry, for he tells us, in the preface, that he has, "by careful and repeated examinations, ascertained, as far as the imperfection of our knowledge will allow, the structure of each part that is described."

The classification of the tissues is, essentially, that of Bichat, avoiding the minute subdivisions of that great anatomist. Thus his arterial, venous, exhalent, and absorbent systems, together with the erectile tissue, which was not noticed by him, are united under the denomination of the vascular system. But we think that the author has gone rather too far in uniting the mucous and dermoid tissues under one head; for the mucous membranes, though continuous with the skin, surely differ from it, both in structure and functions, as much as the serous membranes do from the cellular tissue, and these he has considered as distinct systems. This is, however, a point of no very great importance; for although the "tissues of Bichat" are, as we have just stated, collected into a smaller number of "systems," they are all treated of separately, and in a manner the most convenient to the student, each generally occupying four sections, in the first of which, its general form, extent, and connexions; in the second, its anatomical structure and chemical composition; in the third, its properties and functions; and, in the fourth, its growth and development, are clearly and concisely described.

Of the animal fluids, which could not be included under any of the "systems," a tabular view is given in the introductory part of the work, but only the two most important, the chyle and the blood, are especially considered.

Our general opinion of the work being favourable, we cannot but regret that it should contain several errors and mistatements, which, though not of any very great importance, might easily have been avoided. As they are not very numerous we shall notice most of them in succession. In the first page, we have it stated, among the points of distinction between organic and inorganic bodies, that the latter are capable of being decomposed and recomposed, which is the case only with a comparatively small number of them. In the account of the composition of the blood, it is stated, that "the quantity of the serum is less than half, but more than a third, of the whole mass of the blood;" and shortly afterwards, that "the weight of the fibrin exceeds that of the serum, but is less than that of the red particles"—p. 48. How this can be the case we are at a loss to understand. In the description of the development of the intestines, it is said, that they "are embraced by the umbilical chord."—p. 79. We do not think that any one previously unacquainted with the fact, would understand from this, that they were contained within the dilated sheath of the funis.

At p. 126, it is stated, that the contraction of the scrotum, on exposure to cold, does not depend on the contractility of the cellular tissue, as Bichat supposed, and that "this phenomenon may be more correctly explained, by supposing, that the cremaster

is the principal cause of it, and that the application of cold, by corrugating the scrotum, assists in producing the appearance that has been noticed;" and, subsequently, (at p. 181,) we are told, that "the integuments do not contract on the application of a stimulus, and that when irritated, in a living animal, they exhibit no proof of contraction, independent of that which is caused by the action of the subjacent muscles." Now, in the first place, the cremasters are so loosely connected with the scrotum, that it is often unaffected by them, even when the testicles are drawn up almost to the external ring; they can, therefore, only induce its contraction by relieving it of the weight of those organs; and, secondly, corrugation can only depend on the contraction of the immediately subjacent tissue, so that unless it be intended to deny that cold is a stimulus, the first statement is almost a direct contradiction to the second.

The chapter on the vascular system, though otherwise highly interesting and instructive, (especially that part of it relating to the absorbents, which is, perhaps, the best in the whole work,) contains several errors, which must tend to confuse the student. Thus, at p. 258, it is stated, that some writers, and especially Scarpa, have maintained, that the cellular or elastic coat of an artery is, properly, no part of the vessel, and is "merely an adventitious sheath, furnished by the common cellular membrane, which keeps the vascular organs in their situation, and connects them with the surrounding parts," but that "this opinion is incorrect, for a careful inspection of an arterial trunk shows, that the elastic coat is distinct from the loose cellular tissue, by which it is united to the neighbouring organs, although, as elsewhere, there is a general connexion between the two parts;" and a few pages further on we find, that "many writers have erroneously described this substance (the external or elastic coat) as a distinct cellular coat, placed externally to all the others, but it is evidently nothing more than the common connecting cellular." —p. 273. Here are, then, two statements in direct opposition to each other. But this is not all respecting the cellular coat, for in the very next page, it is stated, that "the resistance of the arteries, after death, depends, *almost entirely*, upon it," which is certainly not the case, for though an artery is much weakened by its removal, it will still, when stretched, offer very considerable resistance, both by the middle and internal tunics.

Almost all writers on anatomy have denied the existence of valves in the veins of the lungs, and Mr. Grainger, relying upon their authority, has made the same statement, (p. 289) without sufficiently examining for himself; for notwithstanding all these authorities, the pulmonary veins do contain valves where they branch off at an acute angle, as was stated by Professor Mayer, of Bonn, about two years ago.—(Vide THE LANCET, No. 258.)

Under the head of "influence of thoracic vacuum," we find the following sentence:—

"Again; in the numerous animals which have neither heart nor lungs, and in the imperfect human fœtus, the heart is wanting; it is evident, in these cases, that no tendency to a thoracic vacuum can take place, and yet the circulation of the venous blood is perfectly accomplished."—p. 294.

There is considerable confusion here.—Neither in those animals which have no heart, nor in the embryo before this organ is formed, is there a true circulation, much less any distinction of arterial and venous blood, and in the latter case, it is probable that some impulse is communicated from the maternal circulation. A far better illustration would have been the circulation in fish, where there is an evident distinction of arterial and venous blood, and certainly no thoracic vacuum; but, after all, the point for which the author is contending is so self-evident, as hardly to require any arguments to prove it; and we are not aware that Dr. Carson, or those who have agreed with him, ever maintained that the venous blood was impelled solely by the formation of a vacuum in the chest.

The author, in opposition to most writers on the subject, is of opinion, that the cuticle is an organised and living part, and adduces some ingenious arguments in favour of this opinion; one of them has certainly not been hitherto sufficiently attended to, viz., that the impossibility of discovering pores in it with the microscope is no proof that they do not exist, since it is equally impossible to discover the foramina through which the hairs pass, or such as may have

been made with a fine needle; but we cannot do better than give his own words:—

"Many anatomists regard the cuticle as an inorganic concretion, which is exuded on the surface of the skin; and which, being constantly renewed, is destroyed on the exterior in proportion as it is produced from the interior. Notwithstanding that it is insensible, and that no blood-vessels, absorbents, or nerves, have ever been satisfactorily traced to it, still there appear to be sufficient proofs that it is, like all the other parts of the living body, an organised substance. I have myself arrived at this conclusion, principally from reflecting on the well-ascertained fact, that no inorganic substance can be intimately attached to a living part, without exciting irritation, and an attempt of nature to cause a separation between them. Now the epidermis is so closely united to the sensible cutis, that it cannot be raised without the aid of chemical means, and yet this connexion produces no disturbance; on the contrary, there is such a mutual sympathy between the two parts, that many of the morbid changes of the one are attended with corresponding alterations in the condition of the other; for the skin and the cuticle are each dependent on the other for the perfection of their structure and the performance of their functions. If the cuticle were not organised, it would be impossible to explain the manner in which it is regenerated after it has been destroyed, or to account for those varieties which exist in the arrangement and texture of its different parts."

It has often been stated, that various parts are insensible, because no pain is produced in them, by certain stimuli, as puncture, the application of acids, etc. This is particularly the case with regard to the tendons and ligaments, and some writers have even denied sensibility to the retina for the same reason. These erroneous opinions, though refuted by Bichat, are, we believe, still in some degree prevalent, and our author's observations on the subject are so clear and concise, that we cannot forbear giving the passage:—

"These parts (tendons and ligaments) possess no animal contractility, so that irritation produces no alteration in their state. Their sensibility has been doubted by many writers, and in the ordinary acceptation of that word, this opinion is probably correct; because if a ligament or tendon be pricked with a needle or cut with a knife, no pain is excited. But it is necessary to bear in mind, that the degree and the kind of sensibility vary in different organs, according to the particular functions they have to perform. The ligamentous, tendinous, and other similar parts have no need of that exquisite sensibility which is so essential to the external surface of the body, because they are protected by their deep situation from any direct mechanical irritation; but as the greater part of these organs is liable to be distended and twisted in the violent movements of the limbs, it is necessary that they should be endowed with that species of sensibility which will enable them to warn the percipient principle when the irritation is carried to an injurious extent. The following experiment illustrates the force of these observations:—If one of the joints be completely exposed in a living animal, by removing the surrounding parts, and particularly the nerves, it is found that the ligaments may be irritated by chemical or mechanical agents, without the animal giving any expression of suffering; but if the same ligaments are forcibly distended and twisted, great pain is produced, and the animal struggles violently."

In the account of the bones is an admirable description of the process by which fractures are united; and we have the less reason to regret that our limits will not allow us to extract it, as the book will, doubtless, be in the hands of every student. In conclusion, we may state, without hesitation, that Mr. Grainger has displayed great ability in the execution of his task, and that his "Elements of General Anatomy" will long maintain the first rank amongst works of a similar description.

LONDON MEDICAL SOCIETY.

Oct. 12th and 19th, 1829.

Mr. Callaway in the Chair.

The discussion on these evenings was wholly confined to the subjects which the reading of Mr. Ashwell's paper, September 28th, had introduced, but the opinions which were expressed on the nature, characters, and treatment of the diseases discussed, were so various and opposite, that our readers would derive little instruction from their publication. The subjects, however, excited considerable interest in the Society, and but for the introduction of that of lithotrity on the following evening, would probably still have ingrossed the conversation.

Monday, Oct. 26.

OPERATION OF LITHOTRITY.

This evening, Mr. Costello, the gentleman whom we have before mentioned as

the assistant of M. Civiale, attended at the rooms for the purpose of showing and explaining the use of the instruments which are used in the operation of lithotrity. The subject excited very great interest, and the room was full to inconvenience. Of the proceedings we give a *verbatim* report; and though it occupies a considerable space, it will be found to convey as complete and interesting a description of the nature and use of the instruments employed by M. Civiale, in the lithontritic process, as can be given in print. The description of Mr. Costello is followed by such further explanation on the subject as appeared, to a large and intelligent body of professional men, to be necessary to a full comprehension of the operation.

After the introduction of the subject by the President, (Mr. Callaway,) Mr. Costello took his station at the table, and said,

It will be unnecessary for me, in a learned Society like this, to enter upon the history of the invention of lithotrity. I have already submitted sufficient details on this subject to the profession in the medical journals of the day; and I shall, therefore, proceed directly to a description of the operation. The reflections which the description of the instruments that I am about to submit to your notice may render necessary, shall be introduced in the course of my observations on their application. Previous, however, to entering upon this, it will be necessary for me to describe several particulars connected with the patient upon whom the operation is to be performed; and this I proceed to do at once. It must be obvious, that the position in which the patient is placed is the first step. This position is totally different from that in which lithotomy is performed, as neither bands nor ligatures are employed for the purpose of binding the patient. The patient is laid on a bed, or sofa, and the head is supported by a single pillow, while the sacrum is elevated by means of a hard cushion, the loins being unsupported. Being thus placed in a horizontal position, the thighs are demiflexed on the trunk, and the legs on the thighs, and the first step of the operation is that of sounding. The position I have described, in general places the stone on the posterior paries of the bladder. When the sound is introduced, and the position of the stone is recognised to be so placed, the injection of the bladder is proceeded with. If we do not succeed in finding the stone thrown backwards into this advantageous position, a gentle movement of the catheter serves so to place it. It is proper to observe, that the injection should be gradually and slowly performed; and it is done by means of a gum-elastic bottle, which is fitted with a stop-cock. This bottle is made of Indian-rubber, and appears capable of holding half a pint. The advantage of such an elastic bottle as this is, that it makes us acquainted with the degree of resistance which the bladder offers to the injection; the pressure of the fluid is consequently moderated by the hand, so as not to excite the reaction of the bladder to expel the fluid again. In case of sluggishness or paralysis of the bladder, a silver syringe deserves preference. When the bladder is distended with fluid (tepid water), the cock is turned, the bottle is removed, and the fluid is kept in the bladder by stopping the catheter with the thumb until we are ready to introduce the lithotrite, the instrument by which the stone is seized, drilled, crushed, or extracted. The principles followed in this introduction, which now takes place, may be thus simply laid down. Civiale divides the canal of the urethra into its moveable and fixed portions. The moveable portion extends from the orifice of the urethra to the arch of the pubes; the fixed, from the arch of the pubes to the neck of the bladder. The moveable portion may be traversed by the instrument in whatever manner the operator chooses. The direction generally preferred, is one in which the lithotrite forms an angle above the horizon of 45 degrees. During its progress down the urethra, the handle of the instrument, which is held between the thumb, the medius, and the index fingers, is brought down to a parallel with the thighs. It is now gently pressed forwards, and while it traverses the membranous or fixed portion of the urethra, the handle descends to an angle below the horizon, equal to that with which its introduction was commenced above. After this, its point arrives at the prostate; the instrument is then elevated, a forward pressure is cautiously and slowly made on it, and it is made to pass softly into the bladder. Having previously become aware of the situation of the stone, the instrument is employed in ascertaining the exact position in which it can be held for grasping the calculus. [Mr. Costello here imitated on the table the mode by which the point is made to come in contact with, go above, pass on either side, and *feel* the precise form and place of the stone.] The instrument is then partially withdrawn, and a screw is turned, which loosens the stem of the three branches and the perforator enclosed in the tube of the lithotrite; these branches (they are at the extremity of the stem, confined in the tube, and expand by their own elasticity when freed) are pushed down the tube, and slowly expanded. By this proceeding they so embrace the stone which they have been allowed to feel, that, upon partly drawing them again up the tube, they grasp the stone, upon which the perforator is then pushed. Graduated scales at the ends of the

branches and the perforator are in the operator's hand, now indicate the diameter and length of the calculus. Thus the calculus, which I now seize on the table, shows its own size, and gives proof of the accuracy of the scale. The branches being now closed, the screw, which was previously loosened to free them, is again turned, and the branches are made secure in their present position, with the stone in their grasp. A small lathe (an instrument which can be held in the hand) is now adapted to the end of the lithotrite, and is held by an assistant; a bow is then applied to a pulley at the end of the perforator, and the operator holding the lithotrite, thus supported by the lathe, with one hand, moves the bow with the other. The progress which the perforator makes through the calculus, is occasioned by a spiral spring shut into a metallic tube on the lathe, which presses upon the end of the perforator, and keeps it close upon the stone. The pressure of this spring is increased, by moving the pivot on which it is sustained closer to the end of the perforator; and its power may be moderated, or altogether suspended, by means of a screw which descends on the spring, and checks its elasticity. You see its force by the pressure I now make upon it with my finger. This, in my hand, is a simple perforator; but here is one, the mechanism of which is peculiar. The head of the perforator which drills the stone can be extended while in the bladder, and made to represent a centre-bit, and the circle of destruction in the calculus is consequently enlarged. It will extend to a diameter of three quarters of an inch. When this last perforator is employed, the injection of the bladder may be effected through the lithotrite itself, if necessary. In the former case, the injection is performed, as already stated, through a catheter. Here is another perforator, somewhat larger, the solidity and power of which are very great. The advantage of the latter is, that being conical at its extremity, it maintains the extension of the branches when drawn within them. These latter perforators were first shown in this country by my friend Pecchioli. Here is one of my own invention, which I have termed the shoulder perforator. Its merit is, that the head of it, while it occupies only the same bulk as that of the simple perforator, effects double the destruction on the stone. The stem of this perforator is prolonged a little beyond the head which is drilled into the stone, and the stem, therefore, becomes a centre for the rotation of the head, or excavator. A calculus of oxalate of lime, or uric acid, is excavated by means of this perforator, to the extent of seven or eight lines for each hole. This instrument I have used within the last few days. It does not, however, possess the advantages for crushing which the simple perforator does. I will now show you, gentlemen, what the various perforators are capable of performing. [Mr. Costello here fixed the lithotrite on the lathe, and, with the assistance of a gentleman present, seized, perforated, and crushed a stone which laid on the table.] You will see, gentlemen, that from the solidity of the branches, there is not the slightest danger of their breaking, and, as distinctly as you can now hear the destruction of this stone, can you also hear it, when the operation is performing in the bladder. The fluid which is injected into the bladder, effectually keeps away the walls of that organ from the claws of the lithotrite, and we can readily distinguish whether the body that is held by them be a stone or a soft body, a calculus or a fungus, excepting which, no other body can possibly get within the grasp of the branches. Here, then, is the destruction of the calculus effected by the simple perforator. Now if we use this instrument, the larger perforator, the destruction of the stone will amount to three quarters of an inch of its diameter. A moderately-sized soft stone can thus be destroyed in three minutes, and when excavated once, if not very hard, it can be crushed. Now I want to show you the action of this spiral spring upon the perforator. Here is the instrument charged with a stone. The assistant holds the lathe thus, and the operator holds it here. The object of the spring is to make the pressure constant and equal. This pressure is moderated by the screw. [Mr. Costello exemplified his description.] I feel, gentlemen, that there are many defects in the description which I have given you. I wish I could have made it better, but I beg to say, that if any gentleman present should be desirous of viewing the instruments, and obtaining a clearer knowledge of them, I shall be very happy to show them to him at my own house. Before, however, I quit the subject, there is another instrument which I should show you. When a fragment of a calculus, or a small stone, happens to be lodged in the urethra, here is a tube containing three branches similar to the lithotrite, down the centre of which a miniature chisel passes. When the stone is seized, this chisel morsels it, and its extraction is more readily effected. Here, also, is another small instrument for extracting fragments from the urethra, which we call a *curette*. (This instrument was straight, with a crotchet at the end.) Gentlemen, I have now to thank you for the liberality and kindness with which you have heard me, and if in any other way I can forward your views in obtaining a knowledge of these instruments, I shall be happy to do so.

The PRESIDENT. The patient is not bound at all?

Mr. COSTELLO. Not at all.

Mr. Costello then exhibited a vice which he had attached to the edge of the table as an occasional substitute for the lathe, which could be elevated or inclined at pleasure. Mr. Costello said its use might make the operation appear more brilliant, but he preferred the hand of an intelligent assistant. Civiale never employed it; he always had some person to hold the lathe. (This lathe was made of gilded silver, and is exactly similar to a watchmaker's lathe.)

The PRESIDENT. Suppose the stone were placed behind an enlarged prostate, by what means should you effect its displacement?

Mr. COSTELLO. By the position obtained from the elevation of the sacrum, with the assistance given by the catheter, or the branches of the lithotrite.

A member inquired whether a small calculus did not sometimes elude the lithotrite?

Mr. COSTELLO. Where the calculus is so small that it is for a time concealed, we dip into the saculus, behind the prostate, and discover the smallest stone. In cases of a large prostate, we sometimes introduce a finger into the anus, with a view to direct our exploration. We vary the position of the patient, we feel right and left, and if we still find nothing, and do not grasp the fragment which is suspected to remain, we make the patient stoop forward, direct him to make water through the instrument, which is done by unscrewing a leathern stopper at its extremity, and the calculus, however small, places itself within the branches, and it is then extracted.

A Member inquired by what means the water was prevented from escaping during the operation.

Mr. COSTELLO. It is prevented by this box, containing a leathern or cork pad, fitted round the extremity of the tube.

A Member. When the stone is once perforated, do you let it go and seize it again in order to perforate it anew, or do you crush it after the first drilling?

Mr. COSTELLO. When small and soft, it may be crushed. In other cases the branches are merely relaxed, and, by managing with the perforator, a new surface is presented for excavation, without loosing the hold.

Mr. CALLAWAY. With respect to children?

Mr. COSTELLO. I have a smaller instrument, which may be, and has been, used on a child three years old, with success.

Mr. CALLAWAY. After the very kind manner in which Mr. Costello has explained his instrument to us, I dare say you feel as I do, much indebted to him. There will, probably, be circumstances arising in your minds requiring explanation, and this is the proper opportunity for making inquiry. It has appeared to me, that the operation on the stone is performed with great facility out of the bladder, and that it is a very easy mode, and I am induced to think it a decided improvement in modern surgery; as yet it is in its infancy.

Mr. COSTELLO. Though it has not obtained in this country as it has in France, yet it can scarcely be said to be in its infancy; since the first lithontritic operation in January 1824, a hundred and forty persons owe their cure to Civiale; and when I left him, in July last, he had seventeen patients on his hands; since then I have been informed by himself, that the administration of hospitals has placed at his disposal a ward in the Hopital Necker for the reception of calculous patients,* and I have no doubt that the number of operations has much increased. Repeated success has attended the trials which have been made by different surgeons, though it is true that some mishaps have occurred. It is by no means an easy operation, although it appears so out of the body; on the contrary, it requires great time and attention, and I should take it to be one of the most difficult in surgery.

Dr. BURNE. Does the stone ever escape from the grasp of the instrument?

Mr. COSTELLO. This sometimes happens in cases where the stone is flat, as also when the stone is polished or smooth; but after a perforation or two has been effected upon it this never happens. In no case where a stone is solidly fixed in the instrument can it escape without the will of the operator.

A Member inquired if patients generally did well after the operation.

Mr. COSTELLO. I have a patient in town upon whom I have operated, though not finally, who has not been absent a single day from his business. In favourable cases it is not followed by fever. I could mention numerous instances in which the patients have come to Civiale to be operated upon, who have girded up their loins and walked away immediately after the operation. There are, certainly, cases in which it has its danger, as, when the bladder is diseased, or the kidneys are diseased, or there is great constitutional irritation. Any operation performed when the health is bad has its ill effects. This is accompanied by but little pain.

A Member remarked that Mr. Costello had said some stones were bruised and others were perforated; he wished to know what rule was to be observed. Mr. Costello replied, that it depended on the softness and size of the stone.

Mr. GREVILLE JONES suggested that the

* Vide LANCET, page 792, preceding Vol.

instrument would be improved if the inner edges of the branches were made sharp, that in being drawn in upon the stone they might the more easily destroy it.

The branches, we may observe, are fluted within, to admit of the stem of the perforator lying amongst them, without which form, the diameter of the lithotrite must be much greater, and the construction more clumsy.

A Member said, it had been stated that of 80 cases which had occurred to Civiale, only 40 were cured. Was this correct?

Mr. Costello said, he should be sorry to introduce any topic connected with the statements of others. If the results were so disastrous, it was impossible that lithotrity could have supplanted lithotomy. The truth is, of these patients two died before even sounding, twenty-one were simply sounded, and the operation refused; ten were explored by the lithotrite; four died from the progress of the disease or other causes after their calculi had been seized and attacked once; and, of three others, one died of gastritis, one of neglected retention of urine, with which he had been seized in the country where he was obliged to be for a short time, and the third, a child 9 years old, died several months after the operation of a suppuration of both the kidneys. Thus, of 32 patients upon which Civiale is represented to have operated, only 43 were really operated on, and of these 43, only one died, and that one of gastritis.

Mr. Dendy inquired what were the circumstances which would be likely to render the operation unsuccessful, when the instrument was used unscientifically, or by inexperienced persons.

From some misunderstanding as to the object of this question, no reply was at first given to it. Mr. Costello observed, that he did not wish to make any remarks which should bear on the unfavourable cases of others, as he considered that science had gained too much by the labours of those who had devoted themselves to this branch of surgery, to justify his treating them lightly. He subsequently observed, however, that one obstacle to a successful operation, is the size of the stone; if it be beyond two inches in diameter, it then evades the grasp of the instrument. It has been asserted, (said Mr. Costello,) that the lithotrite will not seize a stone of twelve or eighteen lines diameter; but you see that I can almost hold this inkbottle (thirty lines in diameter, perhaps) in the instrument. Another cause is, the presence of a considerable number of stones, and then the operation is too tedious; a third cause is, an advanced state of disease of the bladder; a fourth is, that of diseased kidneys; and a fifth is, a bad state of health; the objections, in this respect, that apply to lithotomy, apply also to lithotrity, although it is right to observe, that, even in unfavourable cases, the chances which lithotrity affords are considerably greater. If, also, the instrument be badly introduced, there is danger; it may be plunged into the prostate, or run between the bladder and the rectum, or, with bad instruments, the bladder may be pinched; and, when I mention this last, I may allude to a case which I should not have noticed but for its publication by the operator, Professor Lallemande, of Montpelier. The instrument having been introduced, and its branches expanded, the bladder contracted almost immediately upon them; and, notwithstanding the efforts that were used to disengage it, he could not succeed in doing so, without carrying out a large portion of the lining membrane of the bladder; the patient died; the instrument employed, was the four-branch instrument. In our own cases, when the contraction of the bladder occurs by the escape of the fluid, we wait until it ceases, and then draw down the instrument into the trigona, and, by gently turning it between our fingers, we easily disengage it. I have seen five or six hundred cases, at least, of the introduction of the lithotrite, and never one in which it was not possible to disengage the instrument.

A Member inquired if a diseased prostate prevented the passing of the straight instrument.

Mr. Costello. We operated on a monk, a secretary of Cardinal Fesch, the uncle of Napoleon, whose prostate was enormously large. The introduction was exceedingly difficult, and we did not succeed in passing into the bladder, until the point of the instrument was considerably elevated; the patient underwent six or seven sittings, in the course of which the state of the prostate gradually improved; whether to attribute this to the pressure of the instrument, or the removal of the calculi, I will not determine. With regard to enlarged prostates, I have observed several similar cases to this.

A Member. As this operation has been entirely referred to the male, I wish to ask, if the same mode of procedure is followed in the female.

Mr Costello. It is. The first case I had in this country was that of a female, and I then operated without injecting the bladder.* The stone was eleven lines in diameter. This patient had laboured under incontinence of urine from infancy, until her nineteenth year. It was, therefore, idle to think of injecting the bladder. The girl is perfectly cured.

A Member. To what extent should the operation be carried? Should it be completed at once, twice, or thrice? Would

* Vide Lancet, August 22d.

you be satisfied with boring the calculus once?

Mr. Costello. In Civiale's first operations, he did not discontinue them until he had obtained the complete destruction of the stone, and thus they sometimes lasted forty minutes; the result was, in all cases, fever and rigors at night. On reflection, he determined to abridge the time, and repeat it after the interval of three or four days, and thus these accidents were altogether avoided. The number of the operations must be determined by the size, hardness, and number of the calculi. In no case should they exceed ten minutes.

A Member. Do not fragments sometimes remain behind, and do they not create irritation in the passage?

Mr. Costello. They sometimes do, but patients are always rejoiced at being rid of them, even at the expense of a little suffering. I have already shown you an instrument for extracting them from the urethra, and they sometimes come down even of this size. (The piece appeared to be of the size of a pea.)

A Member. Is there much pain when the instrument is in the bladder?

Mr. Costello. No; the sensation is that of an irresistible desire to make water. The patients suffer in no other way. If the bladder is diseased, the effect is, to some extent, otherwise.

A Member inquired what was the treatment adopted after the operation.

Mr. Costello. The bath is ordered, opium is given by the mouth or rectum, the bowels are kept open, and any indication that arises is attended to.

A Member. To what degree of minuteness are the fragments divided, and when do they come away?

Mr. Costello. From the moment of the operation, and at intervals of from three to five days or longer: the minuteness varies. Much comes away as an impalpable powder. The calculus once reduced to fragments, the instrument is plunged amongst the pieces, when it takes up the first that comes, and crushes it; a much shorter process than when there is occasion to drill. In paralysis of the bladder, as that organ has then no expulsive power, we are obliged to extract all the fragments.

This was the last inquiry made; and Mr. Kingdon then addressing the chair, moved, that for the pains which Mr. Costello had taken, and for the kindness and liberality with which he had replied to their questions, the thanks of the Society be presented to him. The motion was put by the president, and carried unanimously. Mr. Costello returned thanks in a few words, and the meeting separated, after some further observations on another subject, which we shall mention in our next Number.

A general meeting of the Society will be held on Monday evening next, at seven o'clock, when the room will not be open to visitors, unless the business of the Society be concluded in good time.

HUMAN MONSTER WITH TWO HEADS.

DESCRIPTION.

Dr. De Michaelis, professor of surgery and anatomy at the Royal University of Sassari, in Sardinia, gives the following description of a double-headed monster, which, at the time when the report was drawn up, had lived nineteen days; and, according to all appearances, was very likely to live much longer.

Maria Teresa Parodi, at Sassari, ætat. 32, having borne eight well-formed children, was delivered, on the 3d of March, 1829, of a female child, the upper part of which was double; it presented with the heads, which were easily protruded, the one after the other; the umbilical chord and the placenta were single. On closer examination, the child was found to be well-formed inferiorly up to the base of the thorax, which gradually widened, and at the cervical region, gave rise to four well-formed arms, and two distinct necks and heads. The following is an extract from the description, which, however, will hardly be found intelligible, without reference to the figure:—

On regarding the anterior surface of the

thorax, it appears to form only one cavity, common to both children, the middle of the sternum being somewhat concave, and forming, as it were, a furrow, at the sides of which the sternal extremities of the ribs of both the children meet. In the usual situation there are two mammæ; the right of the right, and the left of the left, child; and at the upper angle of the sternum, two well-formed clavicles are inserted, which belong to the external upper extremities; besides these, two smaller clavicles are seen rising from the middle portion of the sternum, for the internal upper extremities, the shoulders of which are lying very near each other. The necks are quite isolated, and have the two shoulders between them; their two anterior surfaces are directed anteriorly, and towards each other, so that the children, in their natural position, embrace each other with the inner arms. (Vid. plate.) The posterior surface of the thorax exhibits, in its median line, the inner ribs of both children meeting each other, and closing it posteriorly; below these, the hypochondriac regions are completely united, and inferiorly closed by a simple sacral bone, the base of which is somewhat broader than usual. Laterally from the posterior median line, the two armpits of the inner upper extremities, and the two internal mammæ are seen very near each other; the two special columns are slightly converged, till they meet at the sacral bone; the circumference of the abdomen does not exceed that of an ordinary infant of the same age; the navel is in the usual place; the pelvis, and the two lower extremities, exhibit nothing unusual; the external genitals are somewhat lower than usual, the labia and nymphæ are well-formed, and cover three apertures, the larger of which being situated in the middle, appears to be the opening of the vagina; the two others being smaller, must, from their lateral position, be the two urethral openings; moreover, the nurse has seen the urine discharged from both openings simultaneously, from which circumstance it should appear that there is one bladder with two urethræ. The anus is single, and at the usual place.

At the first the health of both children appeared to be equally good; but, at the time of drawing up the report, it appeared that the left was more vigorous than the right, which had an icteric hue, and was affected with slight ophthalmia. The children are suckled by the mother and a nurse; they appear to have the sensation of hunger at different times, from which it should seem that there are two stomachs; the pulsations in the præcordial regions are synchronous; the temperature of the skin, evacuation of the fæces and urine, and sleep, are natural. If the genitals or anus be irritated, both children appear to feel it equally.

It may be well to mention, that the two heads have been separately christened; the right having received the name of Rita, the left of Christina.—*Annali Universali di Medicina. Maggio*, p. 381.

GUY'S HOSPITAL.

OPERATIONS.

Tuesday, Oct. 13. Mr. Morgan removed a portion of bone, measuring nearly six inches in length, from the ulna of a child affected with necrosis. Afterwards a man, about 40 years of age, walked into the theatre, with an encysted tumour at the top of his head, nearly the size of an orange, which Mr. Bransby Cooper removed, by making an incision on each side of the tumour, meeting anteriorly and posteriorly, and saving enough of the common integument to form two flaps on each side; it was then dissected out. The disease made its appearance about ten years ago, but within these few months had increased considerably. There were two other tumours of the same character, but smaller, which the "junior" wished to remove. "Now, my man," said Mr. Cooper, "I shall soon remove the others." "But you shan't, though," said the man, who was about to decamp, to the no small amusement of the pupils, but was detained by the dresser, and others near; he could not be prevailed upon (to use his own words,) "to have any more of it."

POISONING BY ARSENIC.

A boy, about 14 years of age, was brought to this Hospital a few days since, in consequence of having eaten arsenic, which had been placed on some cheese for the destruction of rats, in a warehouse. The boy, mistaking it for flour, took the cheese, and after wiping off the chief bulk of the powder, ate it. In a few hours after he was seized with pain in his bowels, and, on being questioned, it was discovered he had taken poison, and he was brought to this Hospital. On his admission, he did not complain of much pain in the bowels, nor when pressure was made over the left hypochondrium. He had vomited a little; bowels rather tympanitic. An emetic was immediately given, when he vomited a membranous substance, which was supposed to be a portion of the mucous membrane of the stomach; bowels being confined, an enema was exhibited, which shortly after returned, and he expired 25 hours after having taken the arsenic.

Inspection of the Body.

Abdomen.—Peritoneum lining the stomach and intestines inflamed, as was likewise that portion covering the bladder.

Stomach.—Mucous membrane inflamed, but not ulcerated; towards the pyloric extremity rather softened, and covered with a false membrane; small intestines contained a gelatinous substance; the solitary glands remarkably distinct, mucous membrane of the bladder inflamed. The other viscera were healthy, as were likewise those of the chest. No arsenic could be detected in substance, and the quantity taken must have been very small.

DISEASE OF THE LIVER.

A woman, 45 years of age, was admitted, two months ago, under Dr. Bright, supposed to be affected with disease of the liver. Six months previous she was attacked rather suddenly, with severe pain in the right side, which was followed by jaundice. She was admitted into this Hospital, and from the symptoms then present, gall-stones were supposed to be the cause. After remaining in the Hospital nearly six weeks she was discharged, apparently well. Mercurials, with the warm bath, having been used with considerable benefit, she continued in her usual state of health till a few days before she came here, when she was again seized with a violent pain in the side, afterwards followed by jaundice. Mercurials were again had recourse to, but without success. A variety of other plans was adopted with as little success, the jaundice not in the least subsiding; to this was added hæmorrhage from the bowels and lungs; and on Oct. 9, she was attacked with coma, in which state she continued till the 12th, when she died.

Post-mortem Examination.

Abdomen.—Liver considerably distended with bile, and the whole of the ducts greatly enlarged; the finger could be passed with facility up the hepatic duct. Gall-bladder completely obliterated, and in its situation a small scirrhous substance, to which was adhering a portion of duodenum, drawn up out of its natural situation, and forming a *cul de sac*. No obstruction in the pancreatic duct; pyloric valve remarkably distinct, but not scirrhous; bladder distended with urine, of a bilious tinge; mesentery loaded with fat.

Thorax.—Lungs gorged with blood nearly the whole of the air cells being filled; a few incipient tubercles.

Cranium.—The bones very vascular and soft; dura mater of a deep yellow, and its vessels highly distended; a small quantity of fluid in the lateral ventricles, of a bilious hue.

Friday, Oct. 16, 1829, Mr. Morgan removed a malignant tumour from the right arm of a middle-aged woman, situated over the external condyle; tumours of a similar kind have been removed from nearly the same place, at three different periods before.

INJURY TO THE FOOT.

Thomas Greenel, æt. 19, was brought to this hospital, Friday afternoon, Oct. 16, in consequence of having received a severe injury on the foot from a crane, to which was attached a considerable weight, the chain having given way above, it came down upon him, crushing his right foot, fracturing the tibia, fibula, astragalus, &c.; laying bare the nerves, two of a considerable size being completely insulated; the leg and thigh were likewise bruised very badly. Mr. Morgan being sent for, on his arrival deemed amputation necessary immediately; and, at five P.M. the patient was placed on the table, and the operation performed in the usual manner at the middle of the leg, the muscles at the back of the leg forming a flap; he was placed in bed rather exhausted, and, in a short time after, violent spasmodic action of the limb came on, and it was with the greatest difficulty it could be kept still; an opiate was given him.

17. Has been rather delirious in the night; countenance flushed; skin hot; pulse 120; muscles on the right side a little affected with spasm; bowels confined; ordered a dose of calomel and colocynth at bed-time.

18. Has had three or four copious evacuations this morning; passed a restless night, and at times wandering; pulse 100. Ordered

Mist. cretæ, ℥iss;
Liq. opii sed. ℳxx. 4ts h.

20. Purging abated; great pain at the lower part of the abdomen; cannot rest at night; at times delirious; great thirst; cannot retain his medicine or food; constant vomiting of bilious matter; continue medicine; ordered a poultice to the stump, which is very tender.

21. No improvement; vomiting still continues; pain still at the lower part of the abdomen; no tenderness on pressure; great thirst. Ordered a mustard cataplasm to the abdomen.

Mist. camph., ℥iss;
Tr. hyosc, ℳxx. 4ts. h.
Calomel, gr. v.;
Opium, gr. ij. at bed-time.

WESTMINSTER HOSPITAL.

BASTARD ICHTHYOSIS.

James Dowling, thirteen years old, was admitted, 29th of July, with a peculiar affection of the skin. His general health had always been good, he had always resided with his parents in a salubrious part

of town, and had been employed as a straw hat-maker. He was affected with the disease about ten years ago, after sleeping in a strange bed; his left leg was first perceived to be sore, and a thick scurf to accumulate on it, but there was no secretion of fluid matter. The disease gradually extended over the entire limb, more thickly covering the knee-joint than elsewhere. In course of time, the whole superfices of the body became invested with the eruption, and the cuticle presented an appearance analogous to scorbutus; it then gradually thickened and condensed, and fissures were formed, giving the whole a scaly appearance resembling the fish-skin disease. Numerous small particles are removed by bathing in hot water, and without producing pain. The knees and elbows are the parts most thickly enveloped. Pulse regular; tongue clean. A warm bath to be had every night, and a fluid ounce of the following medicine every four hours:

Tartrate of antimony, two grains;
Camphor julep, eight fluid ounces. Dissolve.

8. Dr. Roe ordered him to-day to rub one leg only whilst in the bath, with a view of trying the comparative effects of friction and rest.

10. This has been attended with a slight discharge of a thick serous fluid. A lotion of honey, alcohol, and water, to be always applied to the left knee, and its evaporation prevented by a wrapper of *patent* impermeable cloth.

17. The diseased cuticle has peeled off, leaving the natural appearance of skin underneath. The physician ordered the other knee to be treated in like manner, but with plain water in lieu of the lotion.

21. The result has been equally favourable as with the first knee. The diseased cuticle is separating all over the surface, which is softer to the touch. This powder to be taken nightly:

Mercury, with chalk, five grains;
Powdered rhubarb root, six grains. Mix.

From this time he gradually improved, and was sent home convalescent on the 1st of September, at his mother's request.

CUT THROAT.

A. B., pale and exhausted, was admitted, having a self-inflicted wound of the throat. He had drawn a case knife across the larynx, and made a clean incision between the os hyoides and thyroid cartilage. The ligamentum thyro-hyoideum, as well as the thyro-hyoid muscle, was divided; but although the wound was three parts of an inch deep, neither the mucous membrane of the larynx, lingual artery, nor superior laryngeal nerve, was touched. Three sutures were forthwith applied, and the wound dressed *secundum artem*. The patient, a tall gaunt man, was pale and anxious. The pulse scarcely perceptible at the wrist, but not an ounce of blood had been lost from the wound. He was perfectly rational, complained of constant and acute pain all over the abdomen; could not bear the slightest pressure, without shouting with anguish. He had an urgent desire to make water, but had no power to propel it for twenty-four hours. This was accordingly drawn off with a straight catheter, and some relief experienced. A mustard poultice applied to the whole abdomen; and to remedy the extreme depression, brandy and cordials, in moderate doses, were administered. A clyster thrown up immediately.

On inquiry, it appeared the man had been two days the subject of enteritis, and had that morning been bled to thirty-two ounces. This depletion was attended with intense irritability, producing a state of mental wretchedness, which the patient describes as intolerable, and which induced him to attempt suicide.

The symptoms gradually rose in severity, and six hours after admission he expired.

Dissection sixteen hours after Death.

Some old adhesions were found in the chest, but the lungs and heart were comparatively healthy. In the abdomen both the visceral and parietal peritoneum was of a scarlet hue. In the small and large guts the muscular and mucous tunics were equally inflamed with the serous; and a sphacelated opening, large enough to admit the end of a thumb, and from which a quantity of fæcal matter escaped, was seen in the ileum about six inches above the ileo-cœcal valve. The villous coat of the stomach was natural, except a space equal to a crown's circumference on the dorsal surface, which was much injected. The pelvic peritoneum was in the same state as that of the abdomen.

ROYAL WESTERN HOSPITAL.

CASE OF MORTIFICATION OF THE TOES OF THE LEFT FOOT, AND AMPUTATION OF THE LEG.

George Taylor, 59 years of age, of a lymphatic temperament, was admitted into this Hospital on the 15th of last September, having the toes of his left foot in a state of mortification, which he said commenced in June last, in the form of a small speck on one toe, that gradually extended to the others; and that two years before all the toes of his right foot had been affected in a similar way, came off, and then the foot healed.

On examining the left foot, it was found that the mortification had so far advanced, that the tendons alone prevented some of them from dropping off; it also appeared as if extending towards the instep. On the heel, which had but little sensibility when touched, were several dark spots; he suffered so much from pain that he could not sleep, had but little appetite, and expressed a wish that his leg should be amputated; however, as the toes of the other foot had sloughed off, and the foot healed, it was thought advisable not to amputate till no hope remained of such a favourable termination in the present case. Linseed-meal poultice, with which a small quantity of the solution of the chloride of soda was mixed, was ordered to be kept constantly applied to the foot, and an opiate draught given every night; this treatment was continued till the 7th of the month, when the mortification had extended nearly to the ancle joint. It was then determined to amputate the leg below the knee, and Mr. Truman performed the operation by the common circular incision. The patient is going on favourably.

HOTEL-DIEU.

GENO-PLASTIC OPERATION.

A BOY, nine years of age, who was admitted a few months ago, had, in consequence of gangrenous inflammation, lost the greater part of the lower half of the right cheek, and a portion of the lower jaw bone, from the symphysis to the angle. The gap produced by the loss of substance, was of an irregularly circular form, about one inch and a half in diameter; its upper margin was almost on a level with the labial angle; anteriorly it extended to the mouth, posteriorly to within a third of an inch from the anterior margin of the masseter, and downwards to the region of the basis maxillæ. The tongue was completely denuded, and with its right edge adherent to the margin of the perforation, so that it could hardly be moved, and mastication and deglutition were very difficult. The saliva flowed continually out of the mouth. The left half of the jaw-bone having lost its support at the symphysis, was by the muscles drawn backwards and inwards to such an extent, that the teeth were in contact with the palate; slight pressure was, however, sufficient to bring it into its natural position. At the end of June, M. Dupuytren divided the adhesions of the tongue, but could not prevent their being again formed. In order to check the continual discharge of saliva, the following operation was performed on the 30th of August:—A flap of skin, as near as possible of the size and form of the perforation, was cautiously dissected off from the upper portion of the right side of the neck, in front of the sterno-mastoid muscle, a small pedicle only being left, and by twisting this half round, the flap was placed over the perforation, (the edges of which had previously been pared off,) and kept in this situation by five needles. The edges of the wound in the neck were brought into contact by three sutures. The operation was very long, and appeared to be extremely painful; one or two small arteries only were tied. The following night was passed in a very tranquil manner, the patient had even a few hours rest. On the 2d of September the fever was very slight, the flap had not sloughed, and some points of its circumference were in suppuration. During the night of the 2d, the patient was very restless and delirious; the flap was considerably inflamed, and the needle by which the inner edge was kept in contact with the under lip, broke through the skin, so that the edges of the wound became disunited, and it was found necessary to reunite them by means of adhesive plaster. During the following night the fever was still very high, and accompanied by delirium; another needle placed below the former, also broke through the edge of the wound, the margins of which had by this accident become separated for about an inch: the edge of the flap appeared dead; that of the lip was red and tumid; the external and upper portion was of the natural temperature and colour, and firmly adherent to the subjacent parts, so that it was found advisable to withdraw all the needles, and the parts were kept *in situ* by adhesive plaster. On the 5th the fever had greatly subsided; suppuration continued in some parts of the circumference of the flap, but the success of the operation appeared certain, except on the internal portion of the wound, which M. Dupuytren on the 22d of September united by the simple hare-lip operation, with four needles.—*Lanc. Franç.*

HOPITAL DE LA CHARITE.

EXTIRPATION OF THE UTERUS, BY M. ROUX.

Death twenty-four hours after the operation.

L., æt. 38, was admitted on the 28th of August, on account of an affection of the uterus; she stated that she had been married in her twenty-second year, and had borne five children, the youngest of whom was at present six years old. Four years ago, she began to be affected with pain in the uterine region, which, during the last six months, became very violent, and was accompanied with a discharge of reddish mucus; six weeks before her admission, she had a vio-

lent attack of flooding. On examination per vaginam, the neck of the uterus was felt very hard, uneven, and deeply fissured; the uterus itself was much increased in size.* The operation was performed by M. Roux, on the 25th of Sept., in the presence of MM. Boyer, Lerminier, Foucquier, and Récamier, and a great number of practitioners and students. The patient having been placed in the same position as for lithotomy, the uterus was forcibly drawn downwards, and a semilunar incision made in the anterior paries of the vagina; the uterus being now detached from the bladder, the peritoneum was opened by means of a blunt knife, and a probe-pointed bistoury. M. Roux having now introduced his finger, endeavoured to reach the fundus uteri, but finding this impossible he was obliged to use a double hook, by means of which, the uterus having been made to descend still more, the broad ligaments were divided, and two ligatures placed on their inferior portions. The increased size of the uterus at this moment proved again an obstacle to the termination of the operation, and it was only by the combined efforts of MM. Roux and Récamier, that its eversion was accomplished; it was at last protruded with a jerk, and splashed the two operators all over with blood; the inferior portion of the broad ligaments and the round ligaments were now divided, and the operation terminated by detaching the neck of the uterus from the rectum. One accident which happened during the operation is yet to be mentioned; in closing the ligatures, that of the right side broke, and could not be replaced; the hæmorrhage which followed this accident was fortunately but slight. The operation lasted twenty-nine minutes.

On examining the uterus, its neck was found tumid, uneven, excoriated, and beset with deep furrowed ulcerations; the body was two inches and a quarter thick, and four long. After the operation, the patient appeared to be much exhausted; her pulse was very small, and there was a slight discharge of blood from the vagina; the abdomen was kept covered with cold compresses. In the afternoon, an attack of hæmorrhage took place. Towards the evening, the debility still increased, and the temperature of the skin, condition of the pulse, &c., indicated the utmost exhaustion. She died on the following morning, at ten o'clock, about twenty-four hours after the operation. On examination of the body, the pelvis was found to contain a small quantity of blood; the lower portion of the peritoneum was more red than usual; but, as it appeared, more from the blood by which it was covered, than from inflammation; the rectum and bladder were uninjured; the ligature, on the left side, was very well applied.—*La Clinique.*

* The patient still menstruated regularly, from which circumstance it might have easily been inferred, that the uterus could not be degenerated to a very great extent. This was also confirmed by dissection, which proved that it was simply hypertrophied, the neck only being scirrhous and ulcerated. —*Lancette Française.*

IN THE PRESS.

A small work on the Duties of Matrons and Nurses, and on the fitness of the Wives and Daughters of General Practitioners for the Office of Midwives. By Anthony Oyster, Knight.

A Brief Account of the Formation and Sloughing of a hideous filthy Excrescence. By the Yellow Fungus, Dub.

A Critical Essay on the difference between Stone and Bone; and the resemblance between a Patella and a Piece of Flint, "obviously shown." By Edward Stanley, Lecturer on Anatomy.

The Beauties of Human Anatomy, in Poetry. By Frederick Tyrrell and Bransby B. Cooper, Esqrs. Motto, an Extract from the Frenchman's translation of "The Cobbler who lived in a Stall."

> "Dere vonce vas a coblare which liv'd in a stall,
> Vhat sarve him for parlare, for kitchen, and every ting."

Specimen of the Work:

Simon.—That nerves pervade the substance of the bone
Is now pretty regularly, pretty generally known;
They run along the sides with the veins and arteries,
At the top, bottom, middle, both ends, and extremities.

Bransby.—The bones of the pelvis are of singular make,
Zig-zag, in-an'-out,—all sorts of shape;
Os pubis—a queer un',—a shelf it has, O Lard!
As I found to my sorrow in one Stephen Pollard!

REVIEWS OF MEDICAL WORKS.

Having deprived the profession of the late Quarterly Review, conducted by Dr. James Johnstone; having also destroyed some fifty other Medical Reviews; and having reduced, by repeated venesection, the conductors of nine-tenths of those which are still yawning at "the tomb of the Capulets," to a state of miserable inanity, it is

a duty which we owe alike to authors, to the profession, and to the public, that activity, zeal, and talent, should henceforth be exhibited in the Reviewing Department of this Journal.

New Medical Books sent to the Office of The Lancet, 210, Strand, will be reviewed within one month after delivery.

Announcements of works in the press, when properly authenticated, will be readily and regularly inserted.

BOOKS FOR REVIEW.

Principles of Military Surgery, comprising Observations on the Arrangement, Police, and Practice of Hospitals; and on the History, Treatment, and Anomalies of Variola and Syphilis; with cases and dissections. By John Hennen, M. D., Inspector of Military Hospitals. Third edition With a Life of the Author. By his Son, Dr. John Hennen. London, Wilson, 1829. 8vo. pp. 583.

A Practical Treatise on Diseases of the Genitals of the Male; with a Preliminary Essay on the History, Nature, and General Treatment of Lues Venerea. By John Maddox Titley. London, Hebert, 1829, 8vo. pp. 403.

TO CORRESPONDENTS.

Communications received from Mr. Andrew Johnstone — Dr. Walker — Mr. Francis Brown Lloyd—Mr. William Parton—Mr. Spencer—Mr. Henry Swain—Mr. James Frere—Mr. Weiss—Mr. R. T. Webb—Ingenuus—W.—A Subscriber to The Lancet—A Pupil of Guy's—A Student at Guy's—A Pupil of the London Hospital—W. Dublin—Paul Pry—X.—Paul Pry amongst the Medical Students—Machaon—Mr. H. P. Finucane—Mr. Alexander Hett—Mr. S. F. Favell—Mr. J. Whittaker—Hydrogen—A Pupil—Chirurg. Anti-Monopolist—Philo-Lancet—A Robertonian—Chirurgus—A Farmer—Mr. T. Bensley—Mr. J. R. Gilson.

"Delta" complains that Mr. Headington of the London Hospital, does not discharge his obligations to the students; that he throws the entire duty of lecturing upon the shoulders of Mr. Luke, who, our Correspondent alleges, is altogether unequal to the task. If "Delta" will authenticate his letter, it shall be inserted.

"G. H." The next meeting of the Bat Club will be held at the Freemasons' Tavern in Queen Street. Mr. Abernethy will again preside, should his health permit. Mr. Joe Burns is in possession of some interesting facts connected with the proceedings of the respectable minority which remained after the great bulk of the Club quitted the room at their late meeting. Roderick, poor soul, declares, that "no such meeting ever took place." Our reporter defies all their attempts to exclude him.

The communication of Mr. Dermott far exceeds the limits which we can appropriate to any single article.

Mr. Bell's lectures on the teeth may be very excellent, but our correspondent should have shown in what their value consists; as it stands, his letter is an advertisement.

"W." Two winter courses of lectures on anatomy can be attended between October and May; therefore, the required certificate may be obtained in January of the second winter.

"Machaon." The account of the operation performed at the Bury Hospital, must be authenticated. If the statement be correct, the operation was certainly performed in a very unscientific, violent, and bungling manner; but the patient was not murdered.

W. P. V. The advertisement was not received at our office. The fault certainly is not with us. Authors ought not to give a *discretionary* power to booksellers, but they should expressly name the journals in which they wish their works to be advertised. Booksellers are sometimes the proprietors of trash, styled Medical Periodicals. In these cases the sum paid for advertisements is pocketed by themselves. The thing may not circulate out of the street or row in which it is printed, nevertheless the charge to the unfortunate advertiser, for the insertion of his name upon its wrapper, is equal to the demand of "The Times," or any other newspaper of immense circulation. The plasters of the late excrescence exhibited a pretty specimen of a bookseller's system of *advertising*, and the ledger, we presume, a still prettier system of charging. Alas! for the poor authors!

G. H. Butler. The plan would succeed and be perfectly safe, if the party were a graduate in medicine, or a member of the College of Surgeons.

Several gentlemen complain of the silly conduct of some of the students at St. Barthomew's in throwing nutshells and other missiles immediately preceding and during the lecture. This ought not to be tolerated in such a class of students.

A. B. C. We cannot recognise the "Old Friend," but we can discover the really frightful length of A. B. C.'s communication. Should the huge nut contain a kernel, we will endeavour to extract it.